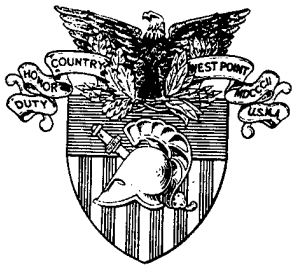

United States Military Academy
West Point, New York 10996

Decision Support for Installations of the United States Army

Major William E. Harmon

OPERATIONS RESEARCH CENTER
TECHNICAL REPORT NO. FY93/92-1

25 June 1993

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THIS REPORT IS A FOLLOW ON REPORT TO THE OPERATIONS RESEARCH CENTER TECHNICAL REPORT NO. FY92/91-1, DECISION SUPPORT FOR INFRASTRUCTURE RENEWAL IN THE UNITED STATES ARMY. THE NEEDS ANALYSIS WAS DONE IN THE REPORT MENTIONED ABOVE. THERE WERE SEVERAL ALTERNATIVES IDENTIFIED TO FILL THE BASIC NEED, I.E., A DETAILED ENGINEERING TECHNICAL ASSESSMENT, A USER'S ASSESSMENT, AND A COMMANDER'S ASSESSMENT. FOR COST AND OTHER CONSIDERATIONS, THE INSTALLATION STATUS REPORT (ISR) HAS BEEN DEVELOPED TO FILL THE NEED.

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Decision Support for Installations of the United States Army

Major William E. Harmon

A TECHNICAL REPORT
OF THE
OPERATIONS RESEARCH CENTER
UNITED STATES MILITARY ACADEMY

Directed by
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Director, Operations Research Center

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25 June 1993

The Operations Research Center is supported by the Assistant Secretary of the Army for Financial Management.

The sponsor for this project is the Assistant Secretary of the Army for Financial Management.

Vita

Major William E. Harmon was born in Pittsburgh, Pennsylvania in 1959. In 1981 he received his B.S. from the United States Military Academy (U.S.M.A.) and was commissioned as a Second Lieutenant in the U.S. Army. He has served in a variety of assignments, including tours as a company commander and a battalion assistant operations officer. In 1989, he received his M.S. in Civil Engineering from Carnegie Mellon University. As an Instructor and Assistant Professor in the Department of Systems Engineering at U.S.M.A., he has taught courses in Quantitative Decision Making and Deterministic Models.

Acknowledgments

I am also grateful to the Honorable Douglas Brook, Assistant Secretary of the Army for Financial Management, for affording me the opportunity to perform this research. Honorable Douglas Brook, Ms. Cynthia Baker, Ms. Barabara Bonessa, and Major Walt Lincoln saw the value of an Installation Status Report and became the champions for the idea and the project.

Colonel James L. Kays gave me a great deal of encouragement and guidance to my efforts on this project. He guided me to structure the Installation Status Report after the Unit Status Report. He devoted time from his busy schedule to travel and brief many high Army officials.

Lieutenant Colonel James E. Armstrong, Jr. also gave me a great deal of encouragement and guidance to my efforts on this project. He briefed the initial concept to high Army officials and was the director for the project. He sat down with me many times when I needed guidance on how to proceed with the project. He laid out the initial framework for the Installation Status Report and gave me ideas on how to implement the report.

I would especially like to thank Ms. Mary Walker and Mrs. Suzanne Carlton, Management Analysis, Office of the Assistant Secretary of the Army for Financial Management. Their dedication was manifested in their significant efforts to coordinate meetings, arrange numerous interviews, track down many documents, and building support for the Installation Status Report. Their support was invaluable.

MAJ David C. Frye laid the gound work for the Installation Status Report by doing the needs analysis.

Mr. William Flickinger, U.S. Army Construction Engineering Research Labs, helped to lay out the initial framework for the Installation Status Report.

I could not have accomplished this work without the untiring administrative efforts of the secretarial staff of the Department of Systems Engineering and the Operations Research Center, Mrs. Sharon Moore, Ms. Betty Melick, Mrs. Millie Counts, Ms. Wendy O'Dell, and Mrs. Nicole Scott.

Mr. Robert A. Adams, Richardson & Kirmse, Inc., developed the crosswalk between the Installation Status Report sub-categories and facility category groups from the Integrated Facilities System (IFS).

Mr. Steve Roberts, Engineering and Housing Support Center, spent numerous hours editing and refining inspection worksheets and standards booklets.

Mr. John Hesson, Richardson & Kirmse, Inc., helped to keep the Installation Status Report effort on track by coordinating in progress reviews, being the liasion to develop the software, and providing engineer advice.

Mr. Elloit Ian Rhodeside, Rhodeside & Harwell, Inc., was responsible for the graphic sketches that are in the standards booklets.

This report represents the synthesis of the ideas of many who have worked on this research effort, especially the members of the Executive Steering Committee and the Project Work Group:

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Project Working Group

Mr. Stan Shelton, Mr. Greg Brewer, Mr. Stewart Grayson, and Mr. Jim Kemp, Office of the Assistant Chief of Engineers; Dr. Daphne Kamely and Mr. Wayne Sisk, Office of the Assistant Secretary of the Army for Research, Development, & Acquistion; LTC Joseph Alexander and Ms. Katy Smith, Office of the Assistant Secretary of the Army for Installations, Logistics, & Environment; Mr. Don Farrow and Mr. Bill Tracy, Office of the Assistant Secretary of the for Financial Management; LTC John Carpenter and LTC Bill Mattfeld, Management Directorate (Office of the Chief of Staff of the Army); LTC Mike Schultz, Program Analysis & Evaluation Directorate (Office of the Chief of Staff of the Army); LTC David Wallen, Office of the Director of Information Systems for Command, Control, Communication, and Computers; LTC Brian Duffy, Office of the Deputy Chief of Staff Operations & Plans; Ms. Darlene Hoffman, Office of the Deputy Chief of Staff for Logistics; LTC Larry Lanzillotta and Ms. Karen McArdle, Office of the Deputy Chief of Staff for Personnel; Mr. Tim Whyte, U.S. Army Community & Family Support Center; MAJ Bill Cross and MAJ Rick Bond, Office of the Surgeon General; LTC Thorton, Office of the Chief of Chaplains; LTC Berry and LTC Crane, Office of the Chief, Army Reserve; Mr. Bill Troumbley, Office of the Chief of the National Guard Bureau; LTC Thomas Frankenfield, Army Environmental Center, (Office of the Assistant Chief of Engineers); LTC Frank Jones, Office of the Inspector General.

Finally, I thank my wife Linda and my daughters Katie and Sarah, for their patience, support, and understanding while I worked on this project -- particularly during my many travels to conduct field research and conduct project briefings.

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Executive Summary

This report is a follow on report to the Operations Research Center Technical Report No. FY92/91-1, *Decision Support for Infrastructure Renewal in the United States Army.* The needs analysis was done in the report mentioned above. There were several alternatives identified to fill the basic need, i.e., a detailed engineering technical assessment, a user's assessment, and a commander's assessment. For cost and other considerations, the Installation Status Report (ISR) has been developed to fill the need. The development of the ISR is discussed in this report.

Basic tenants emerged from the needs analysis. For the Infrastructure Status Report to be successful, it must adhere to the following:

- Objective condition assessments for major categories of infrastructure.
- Army-wide standards easily understood.
- Must include pertinent mitigating factors and other concerns such as environmental, historical, safety, and health.
- Allow commanders to articulate needs in a disciplined way.
- Must measure progress.
- Provide credit and continuity for long haul solutions to compensate for commander focus on the short term condition.
- Must represent facility/service from the users perspective.

These basic tenants must be kept in mind if the project is to ultimately be successful.

This report discusses the development of the Installation Status Report. The report addresses the following work that was done:

- Area, category, and sub-category definitions.
- The integration effort.
- Standards booklets.
- Worksheets.
- Draft Army Regulation--ISR Implementing Instructions.
- Outlined ISR test.

For the ISR to succeed, the soldiers must be able to use it and understand it. The ISR cannot become a report that only the "bean counters" and "technicians" comprehend

1. Introduction

This technical report is the follow on to Technical Report Number FY92/91-1, Decision Support for Infrastructure Renewal in the United States Army. The technical report mentioned covers the needs analysis background. This technical reports covers the development of an alternative to meet the need identified -- the Installation Status Report. The concept mention in Technical Report number FY92/91-1 was developed into a working prototype. This prototype is almost ready to test at Army installations in the next few months.

The scope of the effort has grown to encompass the entire installation by evaluating infrastructure, environment, and services. The original effort was only concerned with evaluating the infrastructure, in broad terms everything that doesn't deploy to war, on an Army installation.

The following statements clearly identify why an Installation Status Report is needed:

- Analogous to the improvement in Army Training: the reason the Army is so much better trained is that over the last 15 years we have had a set of consistent, easily understood Army-wide standards.

- The Infrastructure Status Report will institutionalize consistent easily understood Army wide standards for installation facilities and services.

- Although the Base Realignment and Closure (BRAC) process and existing Engineer databases have improved the inventory, the Army has no credible inspection system on facility condition.

- The general magnitude of the infrastructure problem is known, however it is not known how the problem is distributed across the Army's installations, i.e. "Where is the hurt and who hurts the most? These questions must be answered in a disciplined way so that resources are allocated in a planned manner instead of salami slicing, biggest share to the loudest personality, or band-aid fixes.

- Workload Neutrality: An Infrastructure Status Report will eliminate many ad hoc reports and information gathering efforts that happen on short notice and disrupt work routines. The Infrastructure Status Report will reduce these "jump through the hoop" exercises. The Infrastructure Status Report will eliminate the facility conditions code requirement in Integrated Facilities Systems-Mini/Micro (IFS-M).

- Integrator: The Infrastructure Status Report will pull together many stove pipe infrastructure reporting systems into one easily understood status.

- Involve Commanders: The Nation and Congress are demanding that the old wasteful incrementalism approach to managing our facilities and services be supplanted by innovative involved leaders. This will be a cultural change for our Army. The Infrastructure Status Report energizes commanders to put the heat on the right people.

1.1 Goal and Objectives

The goal of the project has remained the same and is stated as follows: Achieve Installation Renewal (IR)/Facilities Revitalization through improved justification and prioritization of limited Army resources. The overall objectives of this study are to develop a Commander's decision support system that:

- assesses installation *conditions*
- establishes Army-wide *standards*
- articulates *installation* and *Army needs*
- *estimates* IR resource *requirements*
- assists in *prioritizing* programs, projects
- assists in *allocation* of resources
- measures *progress*

This report will describe the process used to develop a prototype report for infrastructure.

1.2 Definitions

1.2.1 Infrastructure

Infrastructure encompasses all of the facilities that are improvements to the real estate of the installations. Infrastructure includes all buildings, utilities, training ranges, and transportation facilities such as roads, airfields, railroads, and docks. It is all of the real property assets that support actual deployment and remain behind when the combat forces and equipment are gone.

1.2.2 Environment

Environment refers to the overall installation environmental assessment of the four pillars -- compliance, restoration, pollution prevention, conservation.

1.2.1 Services

Services encompasses all of the services performed on an installation which are not included as part of the infrastructure or environment.

1.2.2 Sustainment Costs

Sustainment costs refer to all cost that are associated with maintaining the infrastructure in its current condition -- operations and maintenance type costs.

1.2.3 Capital Costs

Capital costs refer to all cost that are associated with improving the condition of the infrastructure.

1.3 Field Research

To enhance understanding of the infrastructure challenge, the following organizations and installations were visited.

- Office of the Assistant Chief of Engineers
- Army Engineering and Housing Support Center
- Army Construction Engineering Research Laboratories
- U.S. Forces Command
- Army Training and Doctrine Command
- Army Material Command
- Fort Hood
- Fort Campbell
- Fort Jackson
- Fort Belvoir
- Fort Knox
- Fort Benning
- Anniston Army Depot
- Aberdeen Proving Ground
- Redstone Arsenal
- Fort Campbell

Participation in the following activity further aided understanding

- Army Worldwide Directorate of Engineering and Housing Training Conference

2. Infrastructure Status Report

Basic tenets emerged from the needs analysis. For the Infrastructure Status Report to be successful, it must adhere to the following:

- Objective condition assessments for major categories of infrastructure.
- Army-wide standards easily understood.
- Must include pertinent mitigating factors and other concerns such as environmental, historical, safety, and health.
- Allow commanders to articulate needs in a disciplined way.
- Must measure progress.
- Provide credit and continuity for long haul solutions to compensate for commander focus on the short term condition.
- Must represent facility/services from the user's perspective.

The Infrastructure Status Report consists of worksheets which establish uniform standards and standards booklets. For a specific facility, Army-wide evaluations will be based on the same inspection items. Evaluations are done at the individual facility level. Evaluations from facilities of the same type are combined to acquire an evaluation for a sub-category. Sub-categorizes are combined to get an evaluation for a category. Then categories are combined to determine an evaluation for an area. Areas are combined to obtain an evaluation for an installation.

2.1 C-Levels -- Unit Status Report (USR)

The C-level unit of measure was chosen since it is what Army commanders use to evaluate the status of units. C-levels were defined to evaluate infrastructure on an installations. The definitions of the C-levels were changed slightly from the USR to reflect conditions which influence infrastructure. In this initial stage of the project, C-levels were to be determine through a combination of the quantity, the quality, and other factors that affect a facility.

2.2 Quantity, Quality, Other Factors

The basic structure and components parts of the Infrastructure Status Report were developed during a brain storming session with LTC James E. Armstrong, Jr. The basic structure and component parts have not substantially changed as the Infrastructure Status Report has been developed.

2.2.1 Quantity

Quantity is determined by the following formula:

Facility/Service Capacity + Facility/Service Requirements

Quantity articulates installation needs for new facilities. Each commander will articulate needs using the same formula.

2.2.2 Quality

Quality is determined by the percent of facilities/services in three condition states: Green, Amber, Red based on Army wide standards using inspection worksheet picture book. Green complies with standards and only requires preventive maintenance (PM) and PM is being performed; and facilities/services in overall good condition. Amber is usable but does not meet standards but is functional and facilities/services in overall fair condition. Red is dysfunctional or substandard or not usable and facilities/services in overall poor condition. Inspection worksheets establish Army-wide standards and allow all infrastructure in a category to be viewed in the same way. Picture books include descriptions and picture that are used to evaluate inspection items in a facility.

Quality assesses installation conditions and establishes Army-wide standards. Quality uses objective condition assessment to evaluate infrastructure using Army-wide standards that are easily understood. Quality represents a view of the facility from the user's perspective.

2.2.3 Other Factors

Other factors are mitigating circumstances specific to particular categories and environmental, health, safety, and preservation (EHSP) concerns. Any other factors which affect an area could raise or lower a C-level. If a C-level is raised or lowered due to other factors mandatory comments are required.

Originally, other factors were taken into account when determining a sub-category C-level. By changing sub-category C-levels it was believed that too much subjectivity would be introduced at a low level into the Infrastructure Status Report. By keeping the C-levels objective up to the area level, a clearer and cleaner picture of the facilities on an installation is presented to the installation commander. The installation commander has the authority to raise or lower an area C-level due to other factors.

Other factors assesses installation conditions and establishes Army-wide standards. Quality uses objective condition assessment to evaluate infrastructure using Army-wide standards that are easily understood. Quality represents a view of the facility from the user's perspective.

2.3 Budget

The budget portion of the Infrastructure Status Report estimates installation renewal resource requirements, assists in prioritizing programs and projects, and assists in allocation of resources. For the system to be useful, the money required to sustain and improve infrastructure must be reported. Likewise, tracking the progress an installation is making to improve its infrastructure must be reported.

2.3.1 Articulate Commander's Needs

For each major category, the dollars required each year for to raise the C-level to a future goal must be identified and reported. The dollars required each year to maintain the current C-level must be identified and reported. Comments are provided to clarify costing. This allows commanders to articulate needs in a disciplined way.

2.3.2 Measure Progress & Provide Credit /Incentive

The Installation Status Report must be linked to the last report by including the current rating along with the last report's rating. The dollars committed from last report to this report against a category must be reported. The dollars programmed and obligated by category must be identified.

3. Integration Effort

Early in the process of developing the Infrastructure Status Report, the comment was made that the report should be the energizer and integrator of other systems. Systems were recognized as stovepipe systems that are hard to update and maintain. Some of the systems that were identified initially are

- Headquarters Integrated Facilities System (HQIFS)
- Integrated Facilities Systems-Mini/Micro (IFS-M)
- Tech Data
- Backlog of Maintenance and Repair (BMAR) Report
- Unconstrained Requirements Report (URR)
- Environmental Report
- Energy Conservation Reports
- Energy Cost Reports

The integration effort between infrastructure systems gained momentum during a meeting which MG Sobke chaired. He formed an Integration Committee to develop an Integration plan.

The Integration Committee designated the Infrastructure Status Report as the lead system and recommended that the following systems support the Infrastructure Status Report:

Real Property Management Automated Tool (RMAT)
Engineered Management Systems (EMS)
Fence to Fence Facility Condition Survey
IFS-M Facility Condition Codes
Real Property Planning and Analysis System (RPLANS)
Maintenance Resource Prediction Model (MRPM)
Army Family Housing Planning Guide--Whole Neighborhood Revitalization Program
Army Automated Environmental Management Information System (AAEMIS)

The Integration Committee recommended that the following systems be discontinued:

Facility Evaluation Report (FER)
Facility Mission Relationships (FMR)
Renovation Decision Support Module (RDSM)

By discontinuing the above systems, the Army saved over $500,000.

Real Property Management Automated Tool (RMAT), an Installation Support Module (ISM) and part of Sustaining Base Information Services (SBIS), is the tool through which installation level systems are integrated. RMAT does not replace any existing or proposed system, but integrates them. The Infrastructure Status Report should be considered for interfacing with RMAT. RMAT is to provide an integrated approach to the management of real property at installations. It is to enable installation level master planners to improve

planning and program execution. It is to enhance the ability of installation decision makers to make decisions based upon consistent, uniform, standard information.

Engineered Management Systems (EMS) data (where available) can supplement the Infrastructure Status Report. The EMS provide Directorate of Engineering and Housing (DEH) functional managers a tool to properly manage a defined infrastructure system: It supports DEH work management system. Thirteen EMSs are either developed or under enhancement/development.

Fence to Fence Facility Condition Survey is a Congressional requirement. The standards developed for the Infrastructure Status Report have the potential to be used for the Fence to Fence. It shares the Infrastructure "Test Concept" (installation Commander role) with OSD. Fence to Fence is to comply with requirements of Senate Report 102-154 to conduct facility condition surveys at 20 DOD installations.

Integrated Facilities Systems-Mini/Micro (IFS-M) is useful as a daily DEH management tool and is a potential source of information for the Infrastructure Status Report. IFS-M is the DEH's work management system. It allows the DEH to enter al work order and service order information into a central database, to manage completion of all assigned work, to track costs against all work, and to capture all Army real property into a central database for inclusion into the Headquarters Integrated Facilities System (HQIFS) system.

Real Property Planning and Analysis System (RPLANS) is used to evaluate Military Construction, Army (MCA) requests. It is used in Base Realignment and Closure (BRAC) as a requirements analysis tool. It can possible provide quantity analysis data for the Infrastructure Status Report. RPLANS evaluates the effect of stationing "what if" exercises on facility requirements.

The current Maintenance Resource Prediction Model (MRPM) is a mainframe computer system which predicts resource requirements given "macro" factors, such as building age, size, type and construction materials. The current model is only for buildings, but independent analysis indicates that it is a reasonably accurate model. This model requires between $30,000-$75,000 a year to operate. If additional funds were available the model could be expanded to other facilities. The funding mentioned in this analysis (Forces Command [FORSCOM] interest) is to develop an installation level, micro computer-based system. This can also be a "micro" factor system. It may use factors such as types and numbers of windows and doors, etc. This will provide a more accurate prediction, but will require a substantial resource commitment on the part of the installation to build and maintain the data. MRPM predicts maintenance and repair resources required for Army buildings.

The Army Family Housing (AFH) Planning Guide provides standards for the Infrastructure Status Report inspection of family housing. It provides realistic costs to determine backlog of family housing revitalization. AFH Planning Guide develops projects for the Whole Neighborhood Revitalization Program.

Army Automated Environmental Management Information System (AAEMIS) is the feeder system to the Infrastructure Status Report for environmental data. AAEMIS provides environmental compliance reporting and tracking and provides management tools for environmental managers (air emission inventory, underground storage monitoring, list of updated environmental laws affecting an installation, etc.).

When the Infrastructure Status Report is operational, it will fulfill the same requirements the Facility Evaluation Report (FER) does. The Infrastructure Status Report will provide macro-level information to MACOMs and HQDA. The FER macro-level reporting mechanism is to be integrated into the Infrastructure Status Report. The FER compares relative facilities, infrastructure, environmental "hurt" at installations for resource allocation, justification purposes. FMR quantifies the contribution of facilities to unit's mission to ensure that facilities are adequately funded when competing with training, equipment and personnel for resources. The installation Status Report will emphasize the critical problems to the Installation Commander for decisions. The Infrastructure Status Report will meet the requirements of the FMR.

Renovation Decision Support Module (RDSM) assesses functional condition and location suitability of a facility for planning and management decisions. The Infrastructure Status Report will include functional and location assessments. Real Property Management Automated Tool (RMAT) is also designed to evaluate functionality.

These systems are all stovepipe systems. The integration effort was needed to eliminate duplication, to report merely the essential information only at the appropriate level, and to reduce operating and maintaining costs of large redundant databases.

4. The Installation Status Report - Part I - Infrastructure

The Infrastructure Status Report was changed to the Installation Status Report (ISR) to enable the report to be used for evaluating the not just infrastructure but also the environment and services. The part of the ISR developed first is infrastructure with environment and services to follow.

For the ISR to be meaningful, standards for evaluating facilities needed to be developed. As a starting point, the Army staff proponent assignment and responsibilities for facilities according to the Construction Review and Requirements Committee (CRRC) was used to identify the responsibility for various categories of military facilities. A Project Working Group (PWG) meeting was held to explain the role of the PWG in developing standards. An Installation Status Report Standards Instructions packet was put together and given to all of the PWG members. The packet included the following: Standards Task Listing, Standards Examples, ISR Standards Instruction Packet, and a TRADOC Communities Of Excellence Picture Book. A portion of the packet is in appendix A. The proponent was tasked to develop inspection worksheets; quality standards word descriptions using the quality condition assessment codes of GREEN, AMBER, and RED; the algorithm to use for determining the quantity ratio; and mitigating environmental, health safety, and preservation (EHSP) factors which influence facility condition.

The proponents of facilities developed standards. These standards were formatted, edited and reviewed by the Operations Research Center (ORCEN), Office of the Assistant Secretary of the Army for Financial Management (OASA[FM]), Office of the Assistant Chief of Engineers (OACE), and members of the Project Working Group (PWG).

The next item to develop was the Implementing Instructions for the ISR. These instructions were formatted similarly to the format used for the USR. The Operations Research Center developed the instructions. The instructions were then further edited and reviewed by ASA(FM), the Executive Steering Committee, the Project Working Group, and the Army Staff. A copy of the ISR Implementing Instructions is in appendix B.

CEAC was tasked to develop cost factors for sustaining and improving facilities. The sustainment cost factors determine the dollars required to maintain their current status. Cost to improve facilities are called capital costs. These costs capture the dollars required to improve all the areas to C-1 levels. The CEAC capital cost factors include costs for building new facilities and costs to improve facilities from RED to GREEN and from AMBER to GREEN.

Richardson & Kirmse, Inc. developed software to enter the facility quality condition data. The ISR software will determine the C-levels and the costs to improve facilities on an installation. The quantity portion of the ISR is done by the software and is determined from RPLANS and IFS-M.

Rhodside & Harwell, Inc. drew the graphics for each inspection item on every worksheet. The graphics depicted what was written in the quality standard word descriptions to fit the conditions of GREEN, AMBER, and RED.

ISR Event	Responsible Organization
Facility Condition Standards	Army staff proponent from the CRRC
Standards formatted, edited, and reviewed	ORCEN, ASA(FM), OACE, PWG members
Sustaining & Improving Cost Factors	CEAC
Software	Richardson & Kirmse, Inc.
Graphics	Rhodeside & Harwell, Inc.

Table 4.1 ISR Development Responsibilities

5. Field Test

The next step in developing the ISR is to field test it at different types of Army installations. The test will occur when all of the pieces come together. To accomplish the field test other information must come together.

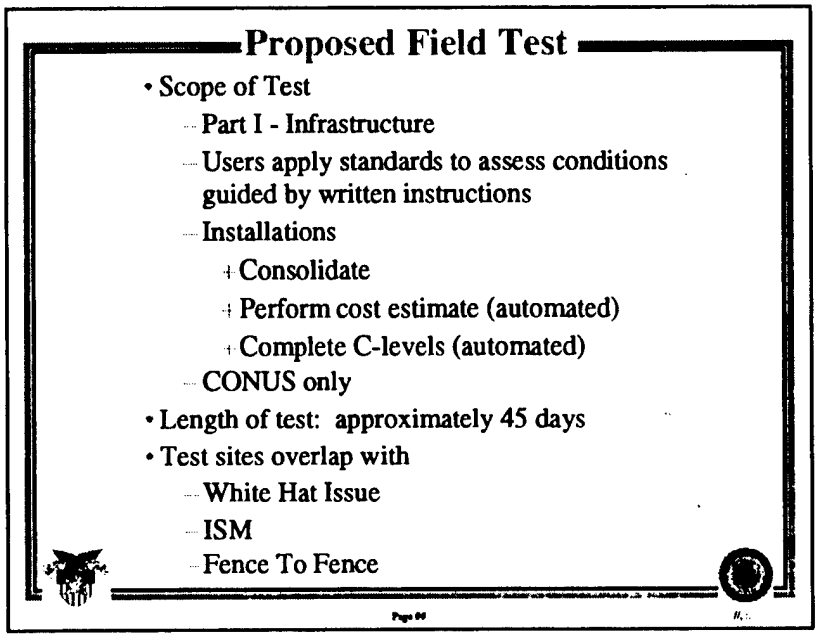

Figure 5.1 Proposed Field Test Slide I

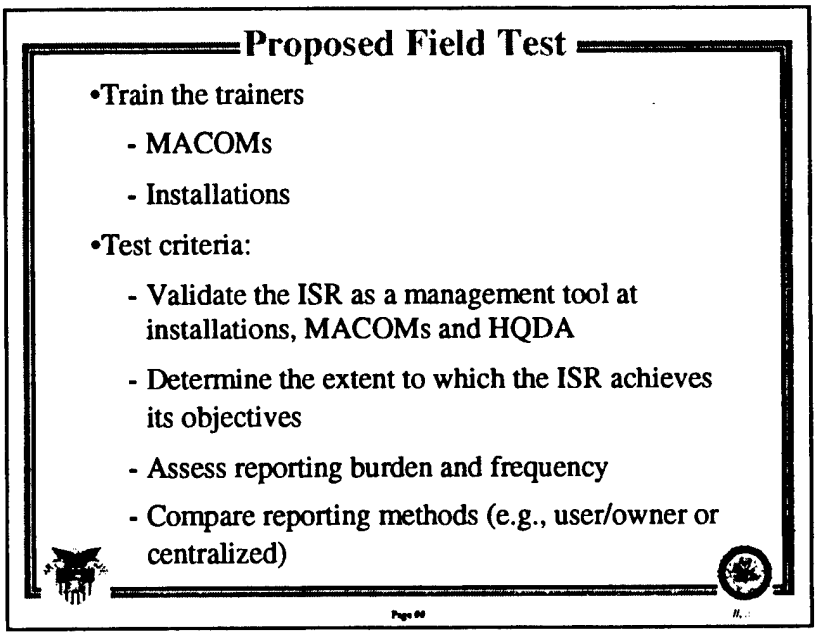

Figure 5.2 Proposed Field Test Slide II

The scope of the test includes the first of what will be three parts of the ISR - Infrastructure. The second and third parts -- Environment and Services -- will be added in subsequent phases.

For the test, users will apply standards to assess conditions guided by written instructions. Installations will consolidate the ISR and using an automated model, will perform cost estimates and determine C-levels using the evaluations and standards algorithms.

The test will be restricted to CONUS and is scheduled for approximately 45 days. As shown on the previous slide, test sites have been carefully selected and provide overlap with other test initiatives.

Train the trainer will occur at MACOM level, with installation teams invited to attend these sessions. The objective is to involve the MACOMs through out the testing and follow-on periods to hopefully expedite implementation.

Test criteria are designed to validate the ISR as a management tool at Installation, MACOM and HQDA. The extent to which the ISR achieves its objectives will be determined. The reporting burden and frequency will be assessed. Different reporting methods (for example, relying on user/owner evaluations or centralized evaluation teams) will be compared.

The purpose of the ISR Test is to determine the effectiveness of the ISR to assess installation conditions and to assist the management of resources for installation sustainment and improvement.

The primary emphasis of testing will be at installation level where Army-wide standards will be applied to conditions for specific types of facilities according to uniform guidelines. Evaluations will be converted into C-ratings and costs for sustainment and improvement will be estimated. The conversion of evaluations into C-ratings and costs will be automated.

ISR TEST EVALUATION OBJECTIVES

1. The primary objective of the test is to validate the ISR as a useful installation management tool for commanders at installation, MACOM and HQDA level.

2. Determine the extent to which installation commanders believe that the ISR:

   a. incorporates the appropriate areas for measuring installation conditions;

   b. uses the correct categories to assess conditions within each area;

   c. incorporates valid standards for evaluating the condition of facilities in each sub-category;

   d. articulates commander's needs for improving installation conditions;

   e. identifies the resource requirements to correct shortcomings.

3. Determine the extent to which installation commanders, MACOMs and HQDA believe that the ISR:

a. assists in prioritizing projects and/or programs needed to upgrade Army installations;

b. assists in allocating funds to priority projects;

c. monitors progress toward installation goals.

4. Determine if the ISR system of coding facility conditions "Green, Amber, Red," and converting these measures into C-ratings to provide overall category and area evaluations, is an effective system.

5. Determine if the ISR, in its current configuration, is "user friendly" in implementation.

6. Determine if standards booklets are helpful and needed in preparing the ISR.

7. Identify reports that can be consolidated/eliminated by the ISR.

8. Determine if ISR submissions will provide useful information to the budget planning process at HQDA level.

9. Identify the strengths and weaknesses of the current report in meeting the overall ISR objectives through a interactive feedback process between the "customer" test installations, MACOMs, HQDA and the USMA ORCEN.

5.1 Objectives

5.1.1 MACOM and HQDA

1. Provide a current status to MACOMs and HQDA of the conditions of Army installations.

2. Provide indicators to MACOMs and HQDA that:

a. represent Army-wide facility conditions and trends;

b. identify areas which degrade installation conditions;

c. identify the shortfalls on installations between existing and required facilities;

d. identify the difference between the actual condition of facilities on installations and Army-wide standards;

e. identify mitigating factors that impact facility requirements and conditions.

3. Assist HQDA, MACOMs and installation commanders in allocating resources and prioritizing programs to upgrade installation conditions.

4. Assist MACOMS and HQDA with information for determining changes in Army policy or in determining needs for new policies.

5. Assist HQDA with information for use with Total Army Basing Study (TABS); Base Closure and Realignment (BRAC); Counter Stationing and Force Structure Decision).

5.1.2 Installations

Provide the installation commander a decision support system that

1. assesses installation conditions
2. establishes Army-wide standards
3. articulates installation needs
4. estimates installation sustainment/renewal resources
5. assists in prioritizing projects
6. assists in allocation of resources
7. measured progress

5.2 Implementing Instructions

The ISR Implementing Instructions are in appendix A.

5.3 Questionnaire

The ISR Field Test Evaluation Survey is in appendix C.

5.4 Summary

The ISR should move rapidly toward implementation, testing what has been received and fielding the portions which pass muster during the test. The ISR must remain an evolving, living document -- since no one has all the answers, and no one will for the foreseeable future. As the ISR continues to develop, it must remain committed to the sensitivity of the workload and continue to consolidate reports at every opportunity. In developing the ISR, the following thoughts must be considered: streamline and automate ISR procedures, minimize the number of categories to the absolutely essential, and simplify standards for evaluation. Most importantly, a partnership with the field must be sustained. This is really the only way the Army will harness and control such an enormous, complex area.

6. Future Research

The scope of this project has expanded considerably. Following are areas of research that will move the project closer to the goal of achieving installation renewal (IR)/ facilities revitalization through improved justification, prioritization, and allocation of limited Army resources.

6.1 Update

Careful consideration must be given as to how the standards used in the ISR are updated. Updating could occur annually or only when changes are needed. Changes could be initiated at any level, however only the proponent should decide which changes are to be implemented. The proponent could use a Total Quality Management (TQM) approach to make changes. Another approach could be a user or customer focus to initiate changes.

6.2 Environment

The environment portion of the ISR should be written by the Environmental Office of the ACE. The actual need for the environment portion of the ISR must be determined before it is included with the infrastructure portion of the ISR. The needs analysis is critical to determine the type and level of detail of information required. This portion should be tested when the ISR is fielded Army wide. The initial idea for this portion, is to have the environment evaluated at the installation level. The environmental assessment could align with the four pillars of the environmental strategy: compliance, restoration, pollution prevention and conservation.

6.3 Services

The services of the ISR should be written by the by many different offices. Services must be clearly defined before proceeding with this section. Similar to the environment, the need for a service portion in the ISR must be determined. This will be the must difficult portion of the ISR to develop, staff, and field. It will require many hours to determine how to evaluate the quality of a service. This is analogous to determining standards for infrastructure. The standards for services must be created. The C-level definitions must be modified slightly to use services terminology.

6.4 Installation Efficiency Analysis

The data collected and used in the ISR should be used in installation efficiency analyses. The ISR would provide the condition of facilities, environment, and services. A prototype system to enable such analyses, has been developed by the Operations Research Center (ORCEN) and the Office of the Assistant Secretary of the Army for Financial Management (OASA[FM]). The point of contact at ASA(FM) for this effort is Ms. Sharon Weinhold.

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Appendix A. ISR Standards Instruction Packet

ISR Standards Instruction Packet

1. PURPOSE. To provide information on determining standards for the categories of infrastructure on the ISR. A graphic which describes the standards development frame work is attached.

2. BACKGROUND.

a. The objectives of this jointly developed ISR initiative are to determine installation infrastructure readiness standards, to develop a methodology for prioritizing Infrastructure Renewal (IR)/Facilities Revitalization projects, to effectively allocate IR dollars and to measure progress.

b. The Installations Status Report (ISR) is a set of non-technical, but technically sound, standards for the various infrastructure systems which will allow commanders to assess the condition and articulate their needs. The ISR is similar in form and language to the Unit Status Report (USR).

3. TASKING. For each category or sub-category of the ISR the following items need to be developed:

a. Develop an inspection worksheet for each category of facilities for which you are responsible.

b. Using the quality condition assessment codes of GREEN, AMBER, and RED develop quality standards word descriptions for all facilities within the categories for which you are responsible. Determine cut-off points for what constitutes a GREEN, AMBER, and RED facility. An example of quality assessment codes and word descriptions are provided below. If possible provide picture book drawings to support the quality condition assessment codes developed for your facilities.

c. Develop how the quantity ratio is to be determined for all facilities within the categories for which you are responsible. For example:

Existing Facilities + Authorized Facilities

d. Other Factors: Determine what mitigating environment, health, safety, and preservation (EHSP) factors affect the category. For example: there is an oil spill uphill from the family housing area which creates an environmental problem.

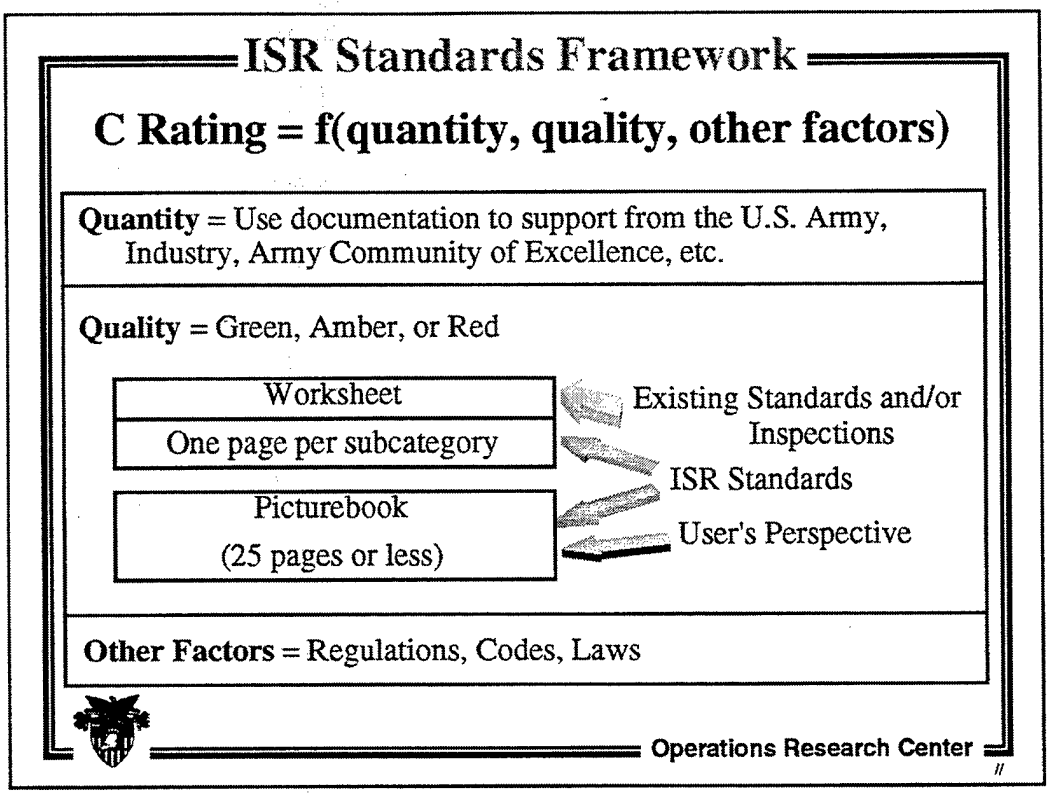

Figure A.1 ISR Standards Framework

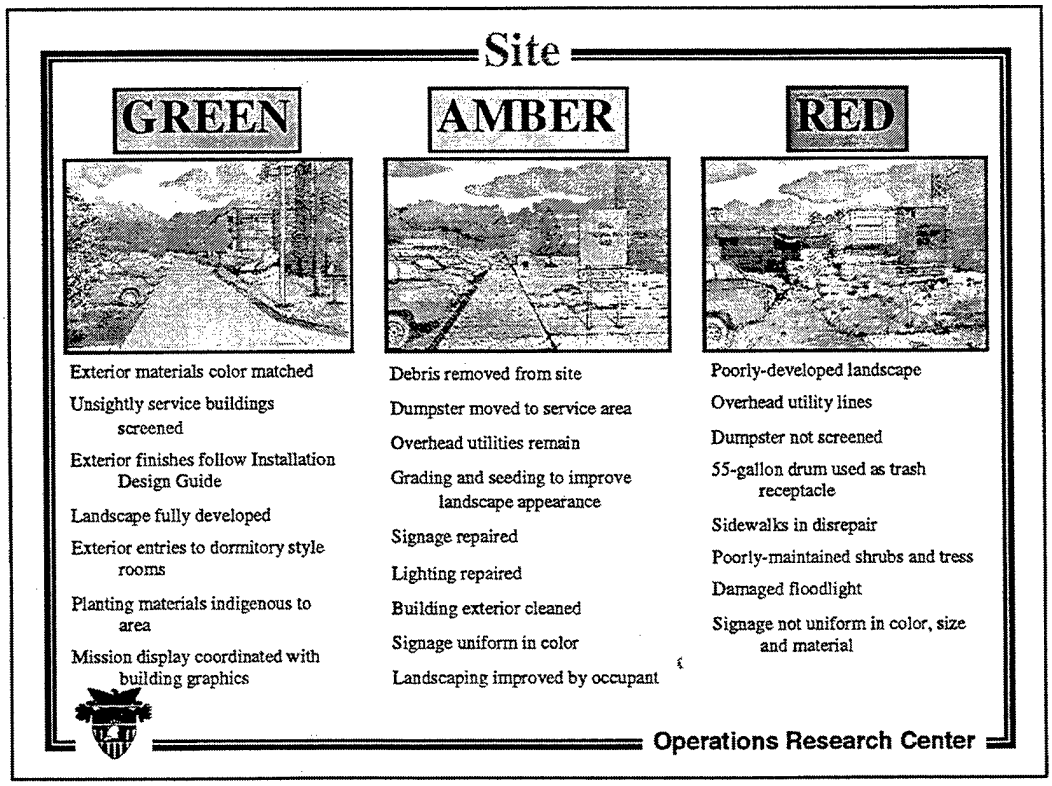

Figure A.2 Standards Booklet Page Example

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Installation Status Reporting

Contents (Listed by paragraph and page number)

Chapter 1
General

1-1. Purpose.

a. These implementing instructions establish the Installation Status Report (ISR), a decision support system to improve management of limited resources for installations. The ISR is comprised of three parts:

(1) Part I - Infrastructure
(2) Part II - Environment
(3) Part III - Services.

b. Part I - Infrastructure is designed to give installation and MACOM commanders, and HQDA an evaluation of both the quality and quantity of available facilities. These implementing instructions explain in detail what installations are required to report, how reports are prepared, and how reports are submitted for Part I - Infrastructure. Reports submitted in accordance with these implementing instructions satisfy the need to--

(1) Establish common Army-wide standards for assessing the condition of facilities.

(2) Identify installation facility renovation, sustainment and new construction requirements.

(3) Synchronize facility renovation efforts across installations and focus the Army's future facility investment.

c. HQDA and MACOM objectives (Part I - Infrastructure) are to provide --

(1) The current status of U.S. Army installation facilities to Headquarters, Department of the Army (HQDA) and all levels of the Army chain of command.

(2) Provide indicators to MACOMs and HQDA that:

(a) represent Army-wide facility conditions and trends;

(b) identify common factors which degrade installation conditions;

(c) identify the quantity shortfalls on installations between existing and required facilities;

(d) identify the difference between the actual condition of facilities on installations and Army-wide standards;

(e) identify mitigating factors that impact facility requirements and conditions.

(3) Assist HQDA, MACOMs and installation commanders in allocating resources and prioritizing infrastructure programs.

(4) Assist MACOMs and HQDA with information for determining changes in Army policy or in determining needs for new policies.

(5) Assist HQDA with information for use with Total Army Basing Study (TABS); Base Closure and Realignment (BRAC); counter stationing and force structure decisions.

d. Installation objectives (Part I - Infrastructure) are to provide the installation commander a report that:

(1) assesses installation conditions

(2) uses established Army-wide standards

(3) articulates installation needs

(4) estimates installation sustainment, renovations and new constructions resource requirements

(5) assists in prioritizing projects

(6) assists in allocation of resources

(7) measures progress

1-2. Concept.

a. Part I of the ISR will provide an installation's status by comparing the quantity to Army facility allowances and quality of installation facilities to Army standards in five areas: Mission Facilities, Strategic Mobility Facilities, Housing, Community Facilities, and Utility Systems. Reports will also include Army Reserve Facilities and National Guard Facilities. The ISR contains a narrative statement of the commander's assessment of the overall status of his installation's facilities.

b. One of the most important aspects of the ISR is the use of common Army-wide standards for assessing facilities. The facility standards were developed by the HQDA functional proponent responsible for the facilities within each category. Standards are a means of assessing the condition of facilities as well as their functionality. The standards for each group of facilities are established and described in standards booklets. Accompanying the word description of most standards is a graphic which depicts the level of condition and functionality in terms of GREEN, AMBER and RED.

c. Cost estimates for infrastructure renewal, renovation, and sustainment are also built into the Installation Status Report system. The cost factors to obtain these estimates are illustrated in appendix K. These estimates are based on uniform, Army-wide cost factors as well as ISR evaluations. The cost estimates will be determined and validated at installation level.

1-3. Scope. Part I of the ISR applies to all facilities for which the Army programs and allocates dollars or is otherwise reimbursed. Facilities on Army installations which do not impact Army budget dollars, or for which the Army is not reimbursed, should not be included in the ISR.

1-4. Responsibilities.

a. *Proponent.* The Proponent will--

(1) Develop policies, standards, and procedures for installation status reporting.

(2) Collect installation data from MACOMs and maintain an automated historical records file.

(3) Process and distribute installation status data in a usable format to requesting Department of the Army agencies and commands.

(4) Establish an automated methodology for reviewing and analyzing installation status data.

(5) Develop and issue guidance in the use of installation status data.

(6) Act as the focal point for the development of procedures for using installation status data and for improving the status of Army installations.

(7) Consider the impact on installation status when making planning, programming, and budget decisions.

(8) Keep the Army leadership apprised of the status of Army installations.

(9) Task Army Staff agencies and major Army commands (MACOMs), as appropriate, to provide supplemental data, analyses of installation status data, and recommendations on how to improve installation status levels.

b. *Army Staff principals, to include the Chief, Army Reserve (CAR) and the Chief, National Guard Bureau (CNGB).* Army Staff principals, CAR, and CNGB will--

(1) Assign specific staff responsibilities for monitoring and utilizing installation status data within their areas of responsibility.

(2) Use installation status data to identify problem areas and perform analyses to determine root causes and possible solutions.

(3) Establish and meet milestone dates for correcting problem areas.

(4) Consider problems identified in Installation Status Reports and the status of Army installations when developing plans and programs.

(5) Assist the Proponent in the development of procedures for using installation status data and improving the status of Army installations.

(6) Review installation status reporting guidance and submit recommended changes as appropriate.

c. *Commanders of MACOMs.* Commanders of MACOMs will--

(1) Assign specific staff responsibilities for supervision and coordination of the Installation Status Reporting System within their commands.

(2) Compile installation ISRs into a MACOM report.

(3) Ensure that subordinate installations comply with installation status reporting requirements, to include the submission of reports in a timely and accurate manner.

(4) Monitor the status of facilities on assigned installations, and analyze and correct noted problem areas as feasible.

(5) Report installation facility status conditions which they cannot resolve to the Army Staff ISR proponent.

(6) Manage resources to improve the status of facilities on assigned installations in line with priorities.

(7) Manage resources to improve the status of facilities utilized by subordinate units on other MACOM installations in line with priorities.

(8) Consider problems identified in Installation Status Reports and the status of facilities on assigned installations when developing plans and programs.

(9) In coordination with the Proponent, manage installation de-activations, activations, conversions, and reorganizations to minimize the impact on installation facility status.

(10) Review installation status reporting guidance and submit recommended changes as appropriate.

(11) Establish a MACOM Host/Tenant relationship to share ISR information.

d. *Installation commanders.* Commanders of installations will--

(1) Assign specific staff responsibilities for supervision and coordination of the ISR at installation level. Normally the Garrison Commander will be assigned the ISR mission.

(2) Ensure that subordinate units and tenants comply with ISR reporting requirements to include submission of reports in a timely and accurate manner.

(3) Review the ISR reports and determine the impact of Other Factors on Area ratings.

(4) Review ISR assessments and cost estimates to prioritize projects by fiscal year.

(5) Authenticate the ISR and provide a narrative statement of the overall condition of installation facilities.

(6) Forward the ISR to designated MACOM in their chain of command.

e. *Division commanders.* Commanders of divisions will--

(1) Assign specific staff responsibilities for supervision and coordination of the ISR at division level.

(2) Ensure that subordinate units comply with ISR reporting requirements to include submission of reports in a timely and accurate manner.

(3) Complete quality assessment of facilities under control of staff activity.

(4) Submit roll-up of Quality inspection worksheets to Garrison ISR Office.

f. *Garrison commanders.* Commanders of garrisons will--

(1) Establish guidance for completing ISR quality assessments. Assign staff (see figure 3-2) responsibility for ISR sub-categories.

(2) Provide ISR training as needed.

(3) Serve as source of information and office of record for the ISR.

(4) Compute and validate the Quantity assessment of all installation facilities using ISR software.

(5) Consolidate, compile, and validate all Quality assessments into overall installation report using ISR software.

(6) Compute cost estimates using ISR software; in coordination with the DEH and DRM, validate cost estimates.

(7) Serve as the office responsible for compilation/completion of ISR.

(8) Provide recommendations to Installation Commanders on prioritization of improvement projects.

(9) Finalize ISR and submit to Installation Commander for approval and signature.

(10) Provide ISR feedback to facility inspectors and owners.

g. *Garrison Staff.*

(1) Complete and consolidate quality assessments of facilities under control of staff activity.

(2) Submit complete Quality inspection worksheet to Garrison ISR Office.

(3) The DEH identifies for the facility users the permanent facilities which should be assessed.

(4) The DEH computes the quantity ratio for all facility sub-categories and submits to the Garrison ISR Office.

(5) DEH/DPCA/DRM provide recommendations on prioritization of capital improvements to Garrison Commander for submission to the Installation Commander.

(6) DEH/DPCA/DRM assists the Garrison ISR Office in preparation of the Sustainment and Capital Costs Report for submission as part of the complete ISR.

(7) DEH//DPCA/DRM assists the Garrison ISR Office in preparation of the Progress Statement Report for submission as part of the complete ISR.

h. *Separate unit commanders/Army Tenants.* Commanders/activity directors of tenant units/organizations will--

(1) Complete Quality assessments of assigned facilities.

(2) Submit Quality assessments through the chain of command to the Garrison ISR Office.

(3) Submit a copy of Quality assessments through the chain of command to the parent MACOM/organization.

i. *Other non-Army Tenants.* Commanders/activity directors of other non-Army tenant units/organizations will--

(1) Complete Quality assessments of assigned facilities.

(2) Submit Quality assessments through the chain of command to the Garrison ISR Office.

(3) Submit a copy of Quality assessments through the chain of command to the parent organization.

1-5. Explanation of abbreviations and terms. Abbreviations and special terms used in this regulation are explained in the glossary.

1-6. References. Required and related publications and prescribed and referenced forms are listed in appendix A.

Chapter 2
Installation Status Report Elements

2-1. The Installation Status Report. The Installation Status Report is designed to provide a timely single source document for assessing key elements of an installation's status. Figure 2-1 is Part I - Infrastructure.

2-2. Areas. The ISR is comprised of five infrastructure areas: Mission Facilities, Strategic Mobility Facilities, Housing, Community Facilities, and Utility Systems. The ISR also reports on Army Reserve and National Guard Facilities. C-levels are determined for all areas.

2-3. Categories. Within each area are categories for which C-levels are determined. The relationship of categories to areas is shown in a table in appendix B.

2-4. Sub-Categories. Within each category are sub-categories for which C-levels are determined. The relationship of sub-categories to categories is shown in a table in appendix C.

2-5. Installation status levels. Installation facility areas, categories, and sub-categories are assigned numerical C-levels. A level of C-1 is the highest level and C-2, C-3, C-4, and C-5 are used to indicate a lesser status level. A level of C-5 is used to show that an installation's status is being degraded due to a HQDA directed action or program, or otherwise is in a non-reportable status. . Remarks will be submitted to clarify C-levels in accordance with paragraphs 3-9 through 3-21 below.

2-6. Quality Evaluation.

a. One of the most important aspects of the ISR is the use of common Army wide standards for assessing facilities. The standards for each group of facilities are found in standards booklets.

b. Quality evaluations of infrastructure facilities are determined using Inspection Worksheets and Standards Booklets. A sample worksheet for barracks is at figure 2-2. Inspection worksheets prescribe facility items to be inspected; a booklet for each item establishes inspection standards. An illustration of the use of an Inspection Worksheet and an accompanying page from a Standards Booklet is shown in figure 2-3. Instructions for completing Inspection Worksheets and using Standards Booklets are located in Chapter 3.

2-7. Quantity Determination.

a. The quantity determination is automated using the ISR software.

b. The Installation Facility Assets and Allowances are taken from Standard Army databases and Real Property Planning and Analysis System (RPLANS).

c. Assets data are obtained from the installation engineer's Integrated Facilities System-Mini/Macro (IFS-M) or Desktop Resource for Real Property Management (DR REAL) Real Property Inventory databases.

d. The facility allowances are obtained using information and algorithms contained in the Headquarters Real Property Planning and Analysis System (RPLANS).

e. Instructions for determining quantity are located in Chapter 3.

INSTALLATION STATUS REPORT

PART ONE - INFRASTRUCTURE

Installation: Fort Harmon | As Of Date: 1 April 93

Mission Facilities	C-1
Training Ranges & Areas	C-1
Maintenance & Production Facilities	C-1
Classrooms	C-1
Research & Development	C-1
Supply & Storage Facilities	C-1
Conventional Ammunition Facilities	C-1
Administrative Facilities	C-1
Strategic Mobility Facilities	C-1
Road & Trail Network	C-1
Railroad	C-1
Airfield	C-1
Ports	C-1
Housing	C-1
Family Housing	C-1
Unaccompanied Personnel Housing	C-1
Dining Facilities	C-1
Community Facilities	C-1
Post Exchange	C-1
Commissary	C-1
Hospital & Medical Facilities	C-1
Child Development Centers	C-1
Community Support	C-1
Utility Systems	C-1
Heat/AC	C-1
Electric/Gas	C-1
Water	C-1
Sewer	C-1
Communications	C-1
Army Reserve Facilities	C-1
National Guard Facilities	C-1
Overall Infrastructure C-Level	C-1

Installation Commander's Signature: John Harg, MC, USA

Figure 2-1. Part I - Infrastructure

Table 2-1
C-level definitions

C-level: C-1 **DEFINITION:**	All required facilities available Meets unit needs and Army standards No functional deficiencies Infrastructure fully supports and enhances mission performance No significant environmental, health, safety, or preservation (EHSP) issues
C-level: C-2 **DEFINITION:**	Most required facilities available Meets unit needs and partially meets Army standards Minor functional deficiencies Infrastructure supports majority of assigned missions Minor environmental, health, safety, or preservation (EHSP) issues
C-level: C-3 **DEFINITION:**	Most required facilities available Meets majority of unit needs, however, does not meet Army standards Minor functional deficiencies Impairs mission performance Minor environmental, health, safety, or preservation (EHSP) issues
C-level: C-4 **DEFINITION:**	More facilities required Does not meet unit needs or Army standards Major functional deficiencies Significantly impairs mission performance Major environmental, health, safety, or preservation (EHSP) issues
C-level: C-5 **DEFINITION:**	Undergoing major reorganization Newly activated/inactivated installation or base closure ongoing

QUALITY ROLL-UP SHEET

Facility Number	Installation Number	User UIC	Color Quality Level (GREEN, AMBER, RED)	Quality Inspector	Date Inspected
632	[illegible]	W3ATAA	AMBER	MAJ Harmon	1 Apr 93
328	[illegible]	W3ATAA	RED	SSG Slape	23 Mar 93

Part of a quality roll-up sheet.

Barracks Inspection Worksheet
Unaccompanied Personnel Housing Category

Overall Quality Rating: AMBER

Facility Number: 632 Installation Number: 1112
Facility User UIC: W3ATAA
Facility Category Group: 72100
Inspector: MAJ Harmon
Date Completed: 1 April 1993

FACILITY CONDITION ASSESSMENT

Condition of Each Item

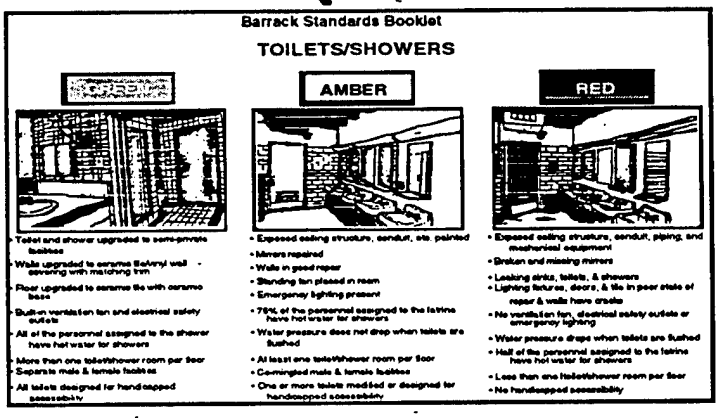
Please an "X" in the box that applies to the Troop Barracks for each inspection area.

Inspection Item	GREEN	AMBER	RED
Common Building Areas			
1. Site & Grounds	X		
2. Parking		X	
3. Building Exterior ***		X	
4. Loading Dock			X
5. Lobby			X
6. Administrative Areas	X		
7. Stairs	X		
8. Corridors	X		
9. Toilets & Showers***		X	
10. Utilities**	X		
Facility Specific Item			
11. Lounge	X		
12. Living Area***		X	
13. Outdoor Formation Area	X		
Sum of "X"s" in each column	7	6	4
Majority item color rating	X		
Critical*** item color rating		X	

Location Comment:

Environmental, Health, Safety, & Preservation (EHSP) Comment:

An Inspection Worksheet.



A page from a Standards Booklet.

The Inspection Wooksheet and the Standards Booklet depict Army-wide quality standards.

Figure 2-3. Determining facility quality

Chapter 3
Instructions for Reporting

Section I
Overview

3-1. Reporting data. Reporting installations use the Installation Status Report located at the end of these implementing instructions. The report should reflect conditions as of (TBD).

3-2. Submission of reports. Reports should be submitted to MACOMs not later than (TBD).

MACOMs should submit reports to the Assistant Secretary of the Army (Financial Management) ATTN: SAFM-RBM not later than (TBD).

3-3. Reporting channels. The Installation Status Report will be consolidated and validated at installation level. The completed ISR will be submitted to the host MACOM. The MACOM will forward the reports to HQDA. (See figure 3-1.) Information copies of the completed ISR will be submitted to the parent MACOMs of the tenants on an installation.

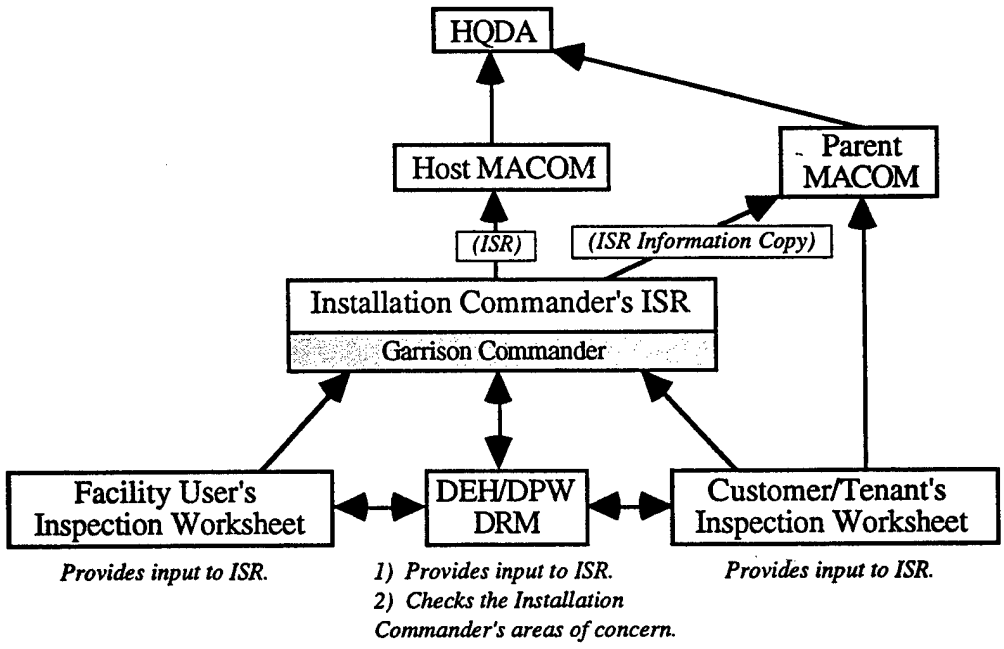


Figure 3-1. ISR reporting channels

3-4. Special reporting instructions. Installations undergoing major reorganization, newly activated or inactivated, or undergoing base closure will report C-5 as outlined below.

a. Installations programmed for inactivation will report C-5 on the last report submitted prior to E-date. Once C-5 has been reported because of inactivation, no further reports are required.

b. HQDA will review the status of installations designated C-5 every 12 months to determine if a C-5 level is still warranted and to evaluate actions being taken to improve the status of the installation.

3-5. Retention of reports. Installation Status Reports will be retained on file for 5 years at the installation and composite reporting level, after which they will be destroyed in accordance with AR 380-5. Commanders at all levels may direct that reports be retained for a longer period of time.

3-6. Standard rules and procedures. The following rules and procedures are incorporated into the ISR Software and are provided below.

a. When fractions need to be rounded, "5" or more will result in rounding to the next higher number and anything less than "5" to the next lower number.

b. The terms "higher or highest" and "lower or lowest", when used to describe C-levels, refer to the value of a C-level; for example, a level of C-1 is higher than a level of C-4.

c. The terms "higher or highest" and "lower or lowest", when used to describe Quality-levels, refer to the value of a color quality level; for example, the value of the colors from best to worse is: GREEN, AMBER, RED. See Table 3-1.

3-7. Types of reports. This paragraph defines the two types of reports required by these implementing instructions. All portions of the Installation Status Report must be completed. The Installation Status Report will be locally reproduced on 8 1/2 by 11 inch paper. A reproducible copy is located at the back of these implementing instructions.

a. *Complete report.* Provide C-level indicators for an installation to include sub-installations. The complete report will be comprised of one ISR for the installation and one ISR for each sub-installation.

b. *Sub-installation report.* Provide C-level indicators for sub-installations. A sub-installation ISR is comprised of one ISR for the sub-installation. A sub-installation ISR will only use quality and other factors input to determine C-levels. In the absence of quantity information, only quality information is used to determine the C-levels for the facilities on a sub-installation.

3-8. Actions by higher commanders.

a. Commanders above the installation level will not change reports of subordinate installations. When errors are detected, reports should be returned to and revised at the level to which the errors apply.

b. Next higher commanders will review reports of subordinate installations for accuracy. Remarks can be used to provide additional information regarding the status of subordinate units.

Section II
Reports Prepared by Installations

3-9. User Instructions. See figure 3-2 for a list of facility reporting offices.

a. *Host Unit.* A Host unit is a unit that belongs to the same MACOM as the installation. Host units must determine the quality assessment of their facilities using standards booklets and turn in inspection work sheets for the facilities which they occupy. For all levels, use the chain of command to forward the quality assessment of facilities. For example, a Company Commander will turn inspection worksheets in to the Battalion Commander. A Battalion Commander consolidates the Companies' inspection worksheets on a quality roll-up report which is submitted through the chain of command to the Division ISR point of contact.

b. *Other Units.* Other units must determine the quality assessment of their facilities using standards booklets and turn in inspection work sheets for the facilities which they occupy. One copy is provided through the chain of command to the Garrison ISR Office. An information copy should be provided through the chain of command to the parent MACOM headquarters.

c. *Garrison Staff.* The Garrison staff must determine the quality assessment of its facilities using standards booklets and turn in inspection work sheets for the facilities which they occupy to the Garrison ISR Office. A quality roll-up sheet is available to assist in consolidating facility reports.

d. *Other Tenants.* Tenants must determine the quality assessment of their facilities using standards booklets and turn in inspection work sheets for the facilities which they occupy or gather the inspection sheets done by their subordinates for their facilities. One copy is provided through the chain of command to the Garrison ISR Office, and an information copy should be provided to their parent MACOM or headquarters agency. (Commissary, MEDAC, DENTAC, AAFES, etc.)

e. *Single Purpose, Multi-User Facilities.* The building commandant will use the appropriate standards booklet and submit the inspection worksheet through the chain of command to the Garrison ISR Office.

f. *Multi-Purpose, Multi-User Facilities.* For each purpose/use there will be one inspection performed. The inspector will submit their completed inspection worksheet through the chain of command to the Garrison ISR Office.

g. *Government Facilities Operated by Contractors (e.g., Laundries, DOL Maintenance Facilities, Government Owned Contract Operated (GOCO) Installations).* The responsible staff office will use the appropriate standards booklet and turn in inspection worksheets to the Garrison ISR Office.

h. *Contractor Built and Operated Facilities. (e.g., Banks, Burger Kings)* If listed on the real property inventory as a reportable facility, the responsible staff office will use the appropriate standards booklet and turn in inspection worksheets to the Garrison ISR Office.

i. *Government Owned and Operated Industrial Plants*. The user will use the appropriate standards booklet and turn in inspection worksheets to the Garrison ISR Office.

j. *Non-Appropriated Facilities.* The user will use the appropriate standards booklet and turn-in inspection worksheets to the DPCA.

Installation Offices Responsible For Installation Status Report Sub-Categories	
Installation Offices	**Sub-Category**
DPTM	Individual Weapon Qualification Ranges
DPTM	Major Weapon System Ranges
DPTM	Maneuver Areas
Using Units & DOL	Maintenance Facilities
DOL, DOIM	Production Facilities
DPTM, DPCA	General Purpose Instruction Facility
DPTM, DPCA	Applied Instruction Facility
DOL	Research & Development Buildings
DOL	Research & Development Ranges
DOL	Bulk Fuel Receipt, Issue, & Storage Site
DOL	General Supply & Storage Facilities
DOL	Ammunition Storage Facilities
DOL	Ammunition Maintenance Facilities
Using Units	Unit Operations Buildings
Using Units/Organizations	General Purpose Administrative Facilities
DPTM	Confinement Facilities
DOL	Surfaced Roads
DOL	Bridges, Unsurfaced Roads, & Tank Trails
DOL	Railroad Track
DOL	Railhead Facilities
DOL	Airfield Facilities
DOL	Airfield Pavements
DOL	Piers & Wharves
DOL	Staging & Marshaling Facilities
DOL	Rail & Truck Operations Areas
DOL	Terminal Intermodal Facilities
DEH	Family Housing
Using Unit/DEH	Senior Bachelor Enlisted/Bachelor Officer Quarters
Using Unit	Barracks
DPCA, DEH	Transient Housing Facilities
Using Unit	Dining Facilities
AAFES	Post Exchange
DeCA	Commissary
DENTAC	Dental Clinic
MEDAC	Hospitals
MEDAC	Troop Medical Clinics
MEDAC	Vet Facilities
DPCA	Child Development Centers
Using Unit, DPCA	Education Facilities
DPCA	Physical Fitness Centers
DPCA	Outdoor Sports & Recreation Facilities
DPCA	Recreation Facilities
DPCA, Chaplain, DEH, DOL	Service Facilities
DEH	Heat/Air Conditioning Source Distribution
DEH	Electric Source, Distribution & Substations
DEH	Water Treatment, Storage & Distribution
DEH	Sewage Treatment, Disposal & Collection
DOIM	Communications
Army Reserve Units	Army Reserve Facility
National Guard Units	National Guard Facility

Figure 3-2. Installation Offices Responsible for Sub-Categories

3-10. Facility quality inspections.

a. To determine facility conditions, inspection worksheets and standards booklets are provided. Figure 3-3 provides instructions for using the standards booklets and inspection worksheets. These instructions are also found as part of each standards booklet.

b. Inspection worksheets will only be completed on the permanent assets used to determine the quantity ratio. The DEH will identity these permanent facilities. World War II wooden facilities and other temporary or semi-permanent facilities will not be evaluated or assessed.

c. It is not necessary to physically assess all permanent facilities. If the DEH or the commander knows that the condition of a group of facilities is RED, it is permissible to complete a quality inspection worksheet for each of these facilities without the physical inspection. However, completed inspection worksheets must be submitted to complete the appropriate cost estimate for improvements and repairs.

Table 3-1
Quality-level definitions

Quality-level:	GREEN
DEFINITION:	Complies with standards Overall good condition
Quality-level:	AMBER
DEFINITION:	Does not meet standards Overall fair condition
Quality-level:	RED
DEFINITION:	Dysfunctional or substandard Overall poor condition

d. Facility quality information is recorded on the Inspection Worksheet. This sheet lists the items which are to be inspected for each facility. (On some worksheets, the condition standards for GREEN, AMBER, and RED are written directly on the worksheet.) Note that some inspection items are identified as critical items. This designation means that these areas are most critical to performing the mission for which the facility is used.

e. When pictures are available for an inspection item, look at the pictures first to get an idea of the condition of the inspection item. Then read the words under the picture. Rate the inspection item based on which picture and description **best fits** the inspection item. Not all words under each picture must describe the inspection item. The pictures and words are only a guide for the best description of the overall condition of an inspection item. Follow the instructions provided in the standards booklets (figure 3-3) and complete the inspection worksheet. An example of a completed worksheet is depicted in figure 3-5..

g. An inspection worksheet is not completed for a facility which is undergoing major repair or renovation. This facility will not be counted when determining the quality level.

1. Select the correct inspection worksheet and standards booklet to evaluate your facility.

2. Rate each inspection item on the inspection worksheet by first looking at the picture in the standards booklet, then reading the bullets under the picture to select the color level that best fits the item being evaluated.

3. If there is not an inspection item in the facility and it is not needed, do not rate that item.

4. If there is not an inspection item in the facility and it is needed, rate that inspection item as RED.

5. Determine the majority item Color-level by summing the "X's" recorded in each color column.

6. Determine the critical item Color-level by selecting the lowest Color-level that any critical item is rated. Critical items are identified by asterisks on the Inspection Worksheets.

7. Determine the facility's overall Color-level by selecting the lower Color-level between the majority items Color-level (determined in step 5) and the critical item Color-level (determined in step 6).

8. If deemed necessary, write comments concerning location. Location pertains to the location of a facility on the installation.

9. If known, write comments concerning environmental, health, safety, and preservation (EHSP). EHSP comments address problems which can degrade a facility.

Figure 3-3. Inspection Worksheet instructions

3-11. Installation Instructions Overview.

a. The Garrison ISR Office compiles and enters installation Quality information and Other Factors information into the ISR software It also enters the ISR quantity information provided by the DEH into the ISR software to determine quantity C-levels and associated

costs. The ISR software will combine quality and quantity information to determine C-levels for sub-categories, categories, and areas. It will also calculate the costs to improve and sustain C-levels. See paragraph 3-24.

b. The Garrison ISR Office prepares the initial draft ISR for the review of the Installation Commander. During the review, the Installation commander will determine the impact of Other Factors on area C-levels. The Installation Commander will also prioritize projects to sustain and raise C-levels for the installation. The Garrison ISR Office will then finalize the ISR report for the commander's signature and narrative comments.

3-12. Determining quality C-level.

a. A Quality C-level will be calculated for each Sub-Category using the results of the individual facility inspections. Results from the Facility Quality Inspections can be consolidated on Quality Roll-Up Sheets. These sheets or the individual inspection sheets will then be forwarded to the organization responsible for data entry into ISR software program provided to the installation. An example of a completed Roll-Up sheet is provided in Figure 3-6.

b. The ISR software program will take the Facility Quality Inspection results and calculate a C-level rating. A detailed explanation of the method used to determine Quality C-levels is provided in Appendix E, Quality Level Explanation.

3-13. Determining quantity C-level.

a. A Quantity C-level will be calculated for each Sub-Category. The ISR software program will perform the calculation using assets reported by the installation's IFS-M or DR REAL Programs to the Headquarters Integrated Facilities System (HQIFS) Program. The software program will contain the standard Army allowance algorithms contained in the RPLANS program.

b. The software program will calculate a Quantity Ratio of permanent assets divided by allowances and convert this to a C-level according to the method described in Appendix F, Quantity C-level Explanation. These ratios will reflect the permanent assets of the entire installation for each facility type and not for individual, subordinate units or organizations.

3-14. Determining Sub-Category C-level.

a. The Quality and Quantity C-levels will be combined by the ISR software program at the Sub-Category level to determine a composite Sub-Category C-level. The composite C-level will be the lower of the two C-levels. Figure 3-4 illustrates the methodology.

b. A detailed explanation of the methods used to determine Sub-Category C-levels is provided in Appendix G, Detailed Sub-Category C-level.

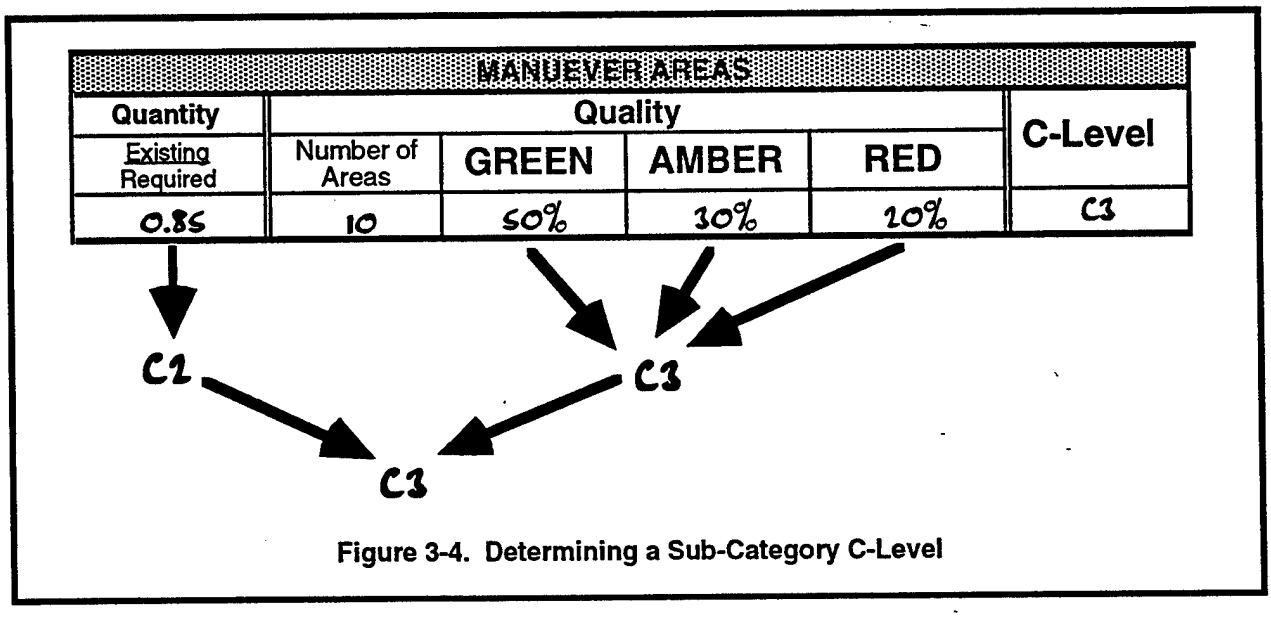


Figure 3-4. Determining a Sub-Category C-Level

3-15. Determining Category C-level.

a. C-level ratings for each Category will be determined by the ISR software program. The software will average the Composite C-levels for each of a Category's subordinate Sub-Categories. In those cases where the installation commander has changed the Sub-Category Composite C-level, the software will use the commander's rating. Sub-Categories which do not have any allowance will not be used in the calculations.

b. A detailed explanation and example of the Category C-level calculations are at Appendix H, Detailed Category C-level.

3-16. Determining Area C-level.

a. C-level ratings for each Area will be determined by the ISR software program. The software will average the C-levels for each of an Area's subordinate Categories. Categories which do not have any allowance will not be used in the calculations.

b. A detailed explanation and example of the Area C-level calculations are at Appendix I, Detailed Area C-level.

3-17. Other factors.

a. While the ISR software program will calculate Area C-levels, it is not meant to be the final rating. The ISR Program is designed to give the installation commander the ability to consider Other Factors which may influence the adequacy of facilities he needs to accomplish his mission. The software will provide the commander a report with the calculated ratings, but then accept and use C-level ratings which the commander says are appropriate. The commander will be asked to provide written justification for any changes he makes.

b. Examples of Other Factors which might influence a commander's decision about a particular C-level include location, environment, health, safety, or preservation. The location factor might be the installation's location in the United States or the facilities' location on the installation. The other factors; environmental, health, safety, and preservation, will be considered when they have a deleterious effect on the ability of the facility type to perform the function it was meant to accomplish. These factors are only to be applied to an entire Area across the entire installation. Table 3-2 provides the rules for raising and lower area C-levels.

Table 3-2
Input to determine the level for Other Factors

Condition: Other factors will help the overall C-level **Adjustment:** Change to next highest C-level
Condition: Other factors will not help or hurt the overall C-level **Adjustment:** 0
Condition: Other factors will hurt the overall C-level **Adjustment:** Lower 1 C-level

3-18. Determining Installation C-level.

a. C-level ratings for the installation will be determined by the ISR software program. The software will average the C-levels for the Areas. Areas which do not have any allowance will not be used in the calculations.

b. A detailed explanation and example of the Installation C-level calculations are at Appendix J, Detailed Installation C-level.

3-19. Costing Overview.

a. Cost factors are included in the Installation Status Report software to automatically calculate the cost of new construction requirements, renovation projects, and the annual sustainment of the installation facilities. All cost factors are expressed in dollars per unit of measure at the Facility Category Group (FCG) level of detail in accordance with AR 415-28. The cost factors are contained in the ISR software.

b. The building blocks for cost reporting are new construction, renovation, and sustainment costs expressed at the FCG level of detail. Using these building blocks, costs are summarized at sub-category, category, area, and installation levels of aggregation while retaining a complete audit to the detailed inspections and their cost implications. The cost factors will be adjusted to accommodate for the differing cost of construction at different locations in the country.

(1) *New construction cost factors.* New construction cost factors include the basic construction cost and allowances for inflation, technological adjustment, cost data reliability, contingency,

supervision and support facility requirements. The ISR software uses these factors to estimate the new construction costs required to improve an FCG quantity C-level to C-1.

(2) *Renovation cost factors.* Renovation cost factors are used to estimate the cost of correcting quality deficiencies noted during the installation inspection. Renovation cost factors are automatically applied in the ISR software to correct facilities which have been graded as AMBER or RED during an inspection. The factors are designed to upgrade the AMBER or RED facilities to GREEN. Renovation factors at the FCG level are provided for renovating an AMBER facility to GREEN and a RED facility to GREEN. The renovation cost factors are expressed as percentages of new construction costs.

(3) *Sustainment cost factors.* Sustainment cost factors are included in the ISR software to automatically calculate the annual cost to maintain a facility at current levels. The cost factors are provided for both permanent and non-permanent (semi-permanent or temporary) facilities and include the components of annual recurring maintenance and major component replacement. This is the only place in which facilities, other than permanent, are examined in the ISR software. The sustainment cost factors, expressed at the FCG level, represent the average annual cost anticipated during the life cycle of the facility. The sustainment cost factors are expressed as percentages of new construction costs.

3-20. Appropriation Sustainment and Capital Costs Report.

a. This report should reflect the sustainment costs by appropriation to maintain the installation facilities at the current C-level. A separate report is prepared for each appropriation. It should also enable the installation to highlight the capital costs by appropriation to improve the installation's C-level. The sustainment costs by appropriation are recorded in Section A, Sustainment Costs. The capital costs by appropriation are recorded in Section B, Capital Costs.

b. Section A - Sustainment Costs. The basic information for this section of the report is contained in the ISR software program report entitled, Sustainment Cost Report and in the Escalation Rates table in Appendix K, Cost Factors of these instructions. Sum the sustainment costs for both the permanent and non-permanent facilities to the Area level by appropriation. Add these two amounts for each Area. These results are expressed in FY 93 dollars. Using the Escalation Rate Table in Appendix K, escalate the values for each Area one year to Budget Year. Record this value in the block on the form for Budget Year Sustainment Cost. Escalate the Budget Year Cost an additional year using the appropriate escalation rate in the table in Appendix K. Record this value in the block on the form for Budget Year + 1. Continue using the appropriate escalation factor to determine the sustainment costs for Budget Year + 2, + 3, and + 4. Add these three costs and record in the block on the form for Outyears. In the Total block, record the sum of the three costs; Budget Year, Budget Year + 1, and Outyears.

c. Section B - Capital Costs. Most of the information for the Capital Cost by appropriation section of the report can come from the ISR software program report entitled, Renovation/New Construction Cost Report and the Escalation Rate tables in Appendix K, Cost Factors of these instructions. Information from the installation MCA program can also be included. The costs are reported as RPMA and MCA costs for the Budget Year through BY + 4.

(1) RPMA Costs. For each of the ISR reporting Areas, sum the Sub-Category costs by appropriation to improve the Quality of the facilities to the C-1 level. These values are expressed in Current Year dollars and represent the total investment required to bring the quality of the installation's facilities to C-1. The installation commander must spread the workload across the five years reported by appropriation on the form as deemed appropriate, keeping in mind the ability of the installation to execute the programs choosen. Once the commander determines the years of execution, the current year dollars need to be escalated by the appropriate factors. If the installation has costs which it feels are more accurate, those values can be substituted for the values derived by the software program.

(2) Military Construction Costs. For each of the ISR reporting Areas, sum the Sub-Category costs by appropriation to improve the Quantity of the facilities to the C-1 level. These values are expressed in current Year dollars and represent the total investment required to bring the quantity of the installation's permanent facilities to C-1. The installation commander must spread the workload across the five years reported by appropriation on the form as deemed appropriate, keeping in mind the ability of the installation and its supporting Engineer district to execute the programs choosen. Once the commander determines the years of execution, the current year dollars need to be escalated by the appropriate factors. If the installation feels that its MCA program or L Account figures for any or all of these values are more accurate, they can be substituted for the values derived by the software program.

3-21. Installation Sustainment and Capital Costs Report.

a. This report should reflect the sustainment costs to maintain the installation facilities at the current C-level. It should also enable the installation to highlight the capital costs to improve the installation's C-level. The sustainment costs are recorded in Section A, Sustainment Costs. The capital costs are recorded in Section B, Capital Costs.

b. Section A - Sustainment Costs. The basic information for this section of the report is contained in the ISR software program report entitled, Sustainment Cost Report and in the Escalation Rates table in Appendix K, Cost Factors of these instructions. Sum the sustainment costs for both the permanent and non-permanent facilities to the Area level. Add these two amounts for each Area. These results are expressed in FY 93 dollars. Using the Escalation Rate Table in Appendix K, escalate the values for each Area one year to Budget Year. Record this value in the block on the form for Budget Year Sustainment Cost. Escalate the Budget Year Cost an additional year using the appropriate escalation rate in the table in Appendix K. Record this value in the block on the form for Budget Year + 1. Continue using the appropriate escalation factor to determine the sustainment costs for Budget Year + 2, + 3, and + 4. Add these three costs and record in the block on the form for Outyears. In the Total block, record the sum of the three costs; Budget Year, Budget Year + 1, and Outyears.

c. Section B - Capital Costs. Most of the information for the Capital Cost section of the report can come from the ISR software program report entitled, Renovation/New Construction Cost Report and the Escalation Rate tables in Appendix K, Cost Factors of these instructions. Information from the installation MCA program can also be included. The costs are reported as RPMA and MCA costs for the Budget Year through BY + 4.

(1) RPMA Costs. For each of the ISR reporting Areas, sum the Sub-Category costs to improve the Quality of the facilities to the C-1 level. These values are expressed in Current Year dollars and represent the total investment required to bring the quality of the installation's facilities to C-1. The installation commander must spread the work load across the five years reported on the form in any way that he deems appropriate, keeping in mind the ability of the installation to execute the program he chooses. Once the commander determines the years of execution, the current year dollars need to be escalated by the appropriate factors. If the installation has costs which it feels are more accurate, those values can be substituted for the values derived by the software program.

(2) Military Construction Costs. For each of the ISR reporting Areas, sum the Sub-Category costs to improve the Quantity of the facilities to the C-1 level. These values are expressed in current Year dollars and represent the total investment required to bring the quantity of the installation's permanent facilities to C-1. The installation commander must spread the work load across the five years reported on the form in any way he deems appropriate, keeping in mind the ability of the installation and its supporting Engineer district to execute the program he chooses. Once the commander determines the years of execution, the current year dollars need to be escalated by the appropriate factors. If the installation feels that its MCA program or L Account figures for any or all of these values are more accurate, they can be substituted for the values derived by the software program.

3-22. Appropriation Progress Statement. The appropriation progress statement is designed to reflect installation progress on C-levels since the date of the previous ISR report. A separate report is prepared for each appropriation. This report should be prepared by the DEH and DRM. Indicate the C-level for each of the ISR areas by appropriation on the previous ISR submission. Enter dollars which have been appropriated for capital improvements. Also enter dollars obligated against capital improvements. Indicate the C-level for each of the ISR areas on the current ISR report. Use the section for comments to explain circumstances concerning installation progress.

3-23. Installation Progress Statement. The progress statement is designed to reflect installation progress on C-levels since the date of the previous ISR report. This report should be prepared by the DEH and DRM. Indicate the C-level for each of the ISR areas on the previous ISR submission. Enter dollars which have been appropriated for capital improvements. Also enter dollars obligated against capital improvements. Indicate the C-level for each of the ISR areas on the current ISR report. Use the section for comments to explain circumstances concerning installation progress.

3-24. Installation Commander's remarks.

a. To support and amplify data submitted in the Installation Status Report provisions have been made for the submission of installation commanders' remarks. This report provides for both mandatory and optional remarks as described below.

b. Remarks should be as concise as possible. Authorized abbreviations as documented in AR 310-50 should be used when appropriate. Remarks should not contain information that is in other portions of the report. Remarks should provide details which will be helpful in resolving problems.

c. Specific mandatory remarks explain the adjustment to area C-level as a result of other factors (location, environmental, health, safety, or historical concerns) They will include the most critical concerns which are causing the adjustment.

3-25. Automation.

a. Installations will be provided a software program which will automate a number of support functions for the ISR Program. The software program will be the mechanism to record and store the individual facility quality inspection results. It will contain the necessary Army standard criteria algorithms to calculate the allowances for each facility type. It will include the installation's facility assets contained in either its IFS-M or DR REAL program and reported by the installation to the HQIFS Program. It will contain the various cost factors mentioned in these instructions. With these data the software program will calculate C-level ratings and various costs by facility type. Software program output reports will provide information with which to complete the various reports required by the ISR Program.

b. While the software program will calculate C-level ratings, it is not meant to be final. The ISR Program is designed to accept and use the commander's judgment in determining the C-level of the various Areas inspected. The commander will provide written justification for changes he makes.

c. Information about the software program is contained in Appendix L, ISR Software Program.

3-26. Submission Requirements.

a. Installations will submit the following reports by the suspense date provided:

(1) Installation Status Report, Figure 3-7.

(2) Appropriation Sustainment and Capital Cost Report, Figure 3-8.

(3) Installation Sustainment and Capital Cost Report, Figure 3-9.

(4) Appropriation Progress Statement, Figure 3-10. This report will not be submitted with the initial installation submission.

(5) Installation Progress Statement, Figure 3-11. This report will not be submitted with the initial installation submission.

b. Installations will also submit written justification for any changes made by the commander.

Section III
Summary Reports Prepared By MACOMs

3-27. Overview. Summary reports will be submitted by MACOMs. They provide an assessment of the status of installations.

3-28. Compiling Installation Status Reports.

The complete report for an installation must be visible up to HQDA level. MACOM submissions should include all parts of the Installation Status Report.

3-29. MACOM Commander's remarks

a. To support and amplify data submitted in the Installation Status Report, provisions have been made for the submission of remarks. This report provides for remarks as described below.

b. Remarks should be as concise as possible. Authorized abbreviations as documented in AR 310-50 should be used when appropriate. Remarks should not contain information that is in other portions of the report. Remarks should provide details which will be helpful in resolving problems which influence an installation's status.

Barracks Inspection Worksheet *Unaccompanied Personnel Housing Category*		Overall Quality Rating: AMBER
Facility Number: 632 Installation Number: 11112 Facility User UIC: W3ATAA Facility Category Group: 72100	Inspector: MAJ Harmon	Date Completed: 1 April 1993

FACILITY CONDITION ASSESSMENT

Condition of Each Item

Place an "X" in the box that applies to the Troop Barracks for **each** inspection area.

Inspection Item	GREEN	AMBER	RED
Common Building Areas			
1. Site & Grounds	X		
2. Parking		X	
3. Building Exterior ***		X	
4. Loading Dock			X
5. Lobby			X
6. Administrative Areas	X		
7. Stairs	X		
8. Corridors	X		
9. Toilets & Showers ***		X	
10. Utilities ***	X		
Facility Specific Item			
11. Lounge	X		
12. Living Area ***		X	
13. Outdoor Formation Area	X		
Sum of "X's" in each column	7	4	2
Majority item color rating	X		
Critical *** item color rating		X	

Location Comment:

Environmental, Health, Safety, & Preservation (EHSP) Comment:

Figure 3-5. Sample Inspection Worksheet

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation: Fort Harmon | As Of Date: 1 April 1993

QUALITY ROLL-UP SHEET

Facility Number	Installation Number	User UIC	Color Quality Level (GREEN, AMBER, RED)	Quality Inspector	Date Inspected
632	1111	W3ATAA	AMBER	MAJ Harmon	1 Apr 93
328	2111	W3ATAA	RED	SSG Slape	23 Mar 93
187	1112	W3ATAA	GREEN	SGT Radiker	16 Mar 93
106	1111	W3ATAA	AMBER	ISG Secor	30 Mar 93
944	1112	W3ATAA	AMBER	SFC Stevenson	1 Mar 93

Figure 3-6. Sample Quality Roll-Up Sheet

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation: Fort Harmon | As Of Date: 1 April 93

Mission Facilities		C-1
Training Ranges & Areas	C-1	
Maintenance & Production Facilities	C-1	
Classrooms	C-1	
Research & Development	C-1	
Supply & Storage Facilities	C-1	
Conventional Ammunition Facilities	C-1	
Administrative Facilities	C-1	
Strategic Mobility Facilities		C-1
Road & Trail Network	C-1	
Railroad	C-1	
Airfield	C-1	
Ports	C-1	
Housing		C-1
Family Housing	C-1	
Unaccompanied Personnel Housing	C-1	
Dining Facilities	C-1	
Community Facilities		C-1
Post Exchange	C-1	
Commissary	C-1	
Hospital & Medical Facilities	C-1	
Child Development Centers	C-1	
Community Support	C-1	
Utility Systems		C-1
Heat/AC	C-1	
Electric/Gas	C-1	
Water	C-1	
Sewer	C-1	
Information Management	C-1	
Army Reserve Facilities		C-1
National Guard Facilities		C-1
Overall Infrastructure C-Level		C-1

Installation Commander's Signature: John Henry, MG, USA

Figure 3-7. Sample Section Of The Installation Status Report

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation: Fort Harmon | As Of Date: 1 April 93

Appropriation: Army Family Housing

APPROPRIATION SUSTAINMENT COSTS TO MAINTAIN CURRENT C-LEVEL

Budget Year (BY) ($1,000's)	Budget Year (BY) + 1 ($1,000's)	Budget Year (BY) + 2 through 4 ($1,000's)	Total ($1,000's)
$10,000	$13,000	$107,000	$130,000

APPROPRIATION CAPITAL COSTS TO RAISE TO A C-1 LEVEL

Area	Current C-Level	Funding Required To Attain C-1 Assessment ($1,000)									
		Real Property Maintenance Activities (RPMA)					Military Construction (MILCON)				
		BY	BY+1	BY+2	BY+3	BY+4	BY	BY+1	BY+2	BY+3	BY+4
Mission Facilities											
Strategic Mobility Facilities											
Housing	C-2	$100	$75	$90	$50	$50	$1,000	$800	$100	$25	$250
Community Facilities											
Utility Systems											
Army Reserve Facilities											
National Guard Facilities											
TOTAL	C-2	$100	$75	$90	$50	$50	$1,000	$800	$100	$25	$250

Figure 3-8. Sample Appropriation Sustainment and Capital Costs Report

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation: Fort Harmon | As Of Date: 1 April 93

INSTALLATION SUSTAINMENT COSTS TO MAINTAIN CURRENT C-LEVEL

Budget Year (BY) ($1,000's)	Budget Year (BY) + 1 ($1,000's)	Budget Year (BY) + 2 through 4 ($1,000's)	Total ($1,000's)
$60,000	$63,000	$117,000	$330,000

INSTALLATION CAPITAL COSTS TO RAISE TO A C-1 LEVEL

Area	Current C-Level	Funding Required To Attain C-1 Assessment ($1,000)									
		Real Property Maintenance Activities (RPMA)					Military Construction (MILCON)				
		BY	BY+1	BY+2	BY+3	BY+4	BY	BY+1	BY+2	BY+3	BY+4
Mission Facilities	C-2	$600	$300	$100	$100	$100	$6,000	$3,000	$1,000	$2,000	$3,000
Strategic Mobility Facilities	C-2	$600	$400	$60	$100	$60	$6,000	$4,000	$100	$100	$600
Housing	C-2	$300	$100	$100	$100	$100	$3,000	$2,000	$600	$160	$1,000
Community Facilities	C-1										
Utility Systems	C-1										
Army Reserve Facilities	C-2	$60	$10	$10	$6	$15	$600	$300	$100	$100	$100
National Guard Facilities	C-2	$30	$10	$10	$15	$15	$300	$200	$60	$115	$15
TOTAL	C-2	$1,430	$960	$380	$410	$380	$14,800	$9,600	$1,860	$4,115	$4,615

FIGURE 3-9. Sample Installation Sustainment and Capital Costs Report

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation: Fort Harmon | As Of Date: 1 April 93

Appropriation: Army Family Housing

APPROPRIATION PROGRESS STATEMENT

Area	Last Report's C-Level	Dollars Appropriated ($1,000)	Dollars Obligated ($1,000)	Current C-Level
Mission Facilities				
Strategic Mobility Facilities				
Housing	C-2	$750	$575	C-2
Community Facilities				
Utility Systems				
Army Reserve Facilities				
National Guard Facilities				
TOTAL	C-2	$750	$575	C-2

Comments:

Figure 3-10. Sample Appropriation Progress Statement

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation: Fort Harmon | As Of Date: 1 April 93

INSTALLATION PROGRESS STATEMENT

Area	Last Report's C-Level	Dollars Appropriated ($1,000)	Dollars Obligated ($1,000)	Current C-Level
Mission Facilities	C-2	$1,200	$1,050	C-2
Strategic Mobility Facilities	C-2	$800	$800	C-2
Housing	C-2	$1,500	$1,375	C-2
Community Facilities	C-1			C-1
Utility Systems	C-1			C-1
Army Reserve Facilities	C-2	$10	$10	C-2
National Guard Facilities	C-2	$12	$9	C-2
TOTAL	C-2	$3,522	$3,244	C-2

Comments:

Figure 3-10. Sample Installation Progress Statement

Appendix A
References

Section I
Required Publications

AR 1-1
Planning, Programming, Budgeting, and Execution System.

AR 11-18
The Cost and Economic Analysis Program

AR 11-32
The Army Long-Range Planning System.

AR 25-1
Army Information Resources Management Plan.

AR 25-3
Army Life Cycle Management of Information Systems.

AR 25-3
Army Life Cycle Management of Information Systems.

AR 210-13
General and Flag Officer Quarters (GFOQ) and Installation Commanders Quarters (ICQ) Management.

AR 210-20
Master Planning for Army Installations.

AR 210-50
Installation Housing Management.

AR 310-50
Authorized Abbreviations.

AR 380-5
Department of the Army Information Security Program.

AR 405-45
Inventory of Army Military Real Property.

AR 415-15
Military Construction, Army (MCA) Program Development

AR 415-28
Department of the Army Facility Classes and Construction Categories

AR 420-10
Management of Installation Directorates of Engineering and Housing.

AR 420-40
Historic Preservation.

AR 420-72
Surfaced Areas, Bridges, Railroad Track and Associated Appurtenances.

TC 25-1
Training Land.

Section II
Related Publications

A related publication is merely a source of additional information. The user does not have to read it to understand this publication.

AR 11-2
Internal Management Control.

Section III
Prescribed Forms

Section IV
Referenced Forms

Appendix B
Relationship of Categories to Areas

Installation Status Report Areas:

1. Mission Facilities
2. Strategic Mobility Facilities
3. Housing
4. Community Facilities
5. Utility Systems
6. Army Reserve Facilities
7. National Guard Facilities

Relationship Of Categories To Areas On The Installation Status Report	
Category	**Area**
Training Ranges & Areas	Mission Facilities
Maintenance & Production Facilities	Mission Facilities
Classrooms	Mission Facilities
Research & Development	Mission Facilities
Supply & Storage Facilities	Mission Facilities
Conventional Ammunition Facilities	Mission Facilities
Administrative Facilities	Mission Facilities
Road & Trail Network	Strategic Mobility Facilities
Railroad	Strategic Mobility Facilities
Airfield	Strategic Mobility Facilities
Ports	Strategic Mobility Facilities
Family Housing	Housing
Unaccompanied Personnel Housing	Housing
Dining Facilities	Housing
Post Exchange	Community Facilities
Commissary	Community Facilities
Hospital & Medical Facilities	Community Facilities
Child Development Centers	Community Facilities
Community Support	Community Facilities
Heat/AC	Utility Systems
Electric/Gas	Utility Systems
Water	Utility Systems
Sewer	Utility Systems
Information Management	Utility Systems
Army Reserve Facilities	Army Reserve Facilities
National Guard Facilities	National Guard Facilities

Appendix C
Relationship of Sub-Categories to Categories

Relationship Of Sub-Categories To Categories On The Installation Status Report	
Sub-Category	**Category**
Individual Weapon Qualification Ranges	Training Ranges & Areas
Major Weapon System Ranges	Training Ranges & Areas
Maneuver Areas	Training Ranges & Areas
Maintenance Facilities	Maintenance & Production Facilities
Production Facilities	Maintenance & Production Facilities
General Purpose Instruction Facilities	Classrooms
Applied Instruction Facilities	Classrooms
Research & Development Buildings	Research & Development
Research & Development Ranges	Research & Development
Bulk Fuel Receipt, Issue, & Storage Site	Supply & Storage Facilities
General Supply & Storage Facilities	Supply & Storage Facilities
Ammunition Storage Facilities	Conventional Ammunition Facilities
Ammunition Maintenance Facilities	Conventional Ammunition Facilities
Unit Operations Buildings	Administrative Facilities
General Purpose Administrative Facilities	Administrative Facilities
Confinement Facilities	Administrative Facilities
Surfaced Roads	Road & Trail Network
Bridges, Unsurfaced Roads, & Tank Trails	Road & Trail Network
Railroad Track	Railroads
Railhead Facilities	Railroads
Airfield Facilities	Airfield
Airfield Pavements	Airfield
Piers & Wharves	Ports
Staging & Marshaling Facilities	Ports
Rail & Truck Operations Areas	Ports
Terminal Intermodal Facilities	Ports
Family Housing	Family Housing
Senior Bachelor Enlisted/Bachelor Officer Quarters	Unaccompanied Personnel Housing
Barracks	Unaccompanied Personnel Housing
Transient Housing Facilities	Unaccompanied Personnel Housing
Dining Facilities	Dining Facilities
Post Exchange	Post Exchange
Commissary	Commissary
Dental Clinic	Hospital & Medical Facilities
Hospitals	Hospital & Medical Facilities
Troop Medical Clinics	Hospital & Medical Facilities
Vet Facilities	Hospital & Medical Facilities
Child Development Centers	Child Development Centers
Education Facilities	Community Support
Physical Fitness Centers	Community Support
Outdoor Sports & Recreation Facilities	Community Support
Recreation Facilities	Community Support
Service Facilities	Community Support
Heat/Air Conditioning Source Distribution	Heat/AC
Electric Source, Distribution & Substations	Electric/Gas
Water Treatment, Storage & Distribution	Water
Sewage Treatment, Disposal & Collection	Sewer
Information Management	Information Management
Army Reserve Facility	Army Reserve Facilities
National Guard Facility	National Guard Facilities

Appendix D
Sub-Categories Cross-walk To Facility Category Group (FCG)

For all Sub-Categories except the Communications Equipment, the DEH can provide a list of all facilities which fall under each of the Sub-Categories. Using the Cross-Walk Table contained in this appendix and the IFS-M or DR REAL Systems, the DEH can produce lists of facilities by Sub-Category which include the facility number and the responsible organization. Multi-use facilities will appear on each Sub-Category list which applies.

Sub-Category	Facility Category Group	Facility Category Group (FCG) Description
Mission Facilities		
Individual Weapon Qualification Ranges	17121	Indoor Firing Range
	17901	Basic 25m Firing Range
	17902	Field Firing Range
	17903	Record Firing Range
	17907	Sniper Training Range
	17909	Machine Gun 10m Range
	17910	Machine Gun Transition Range
	17917	Grenade Launcher Range
	17923	MOUT CFT Facility
	17928	Combat Pistol Range
Major Weapon System Ranges	17912	APC Firing Range
	17930	Tank Gunnery 1:30 & 1:60
	17931	Tank Gunnery 1:5 & 1:10
	17932	Tank Gunnery Stationary
	17133	Tank Crew Combat Fire
	17937	Aerial Gunnery Range
	17942	Field Artillery Indirect Fire Range
	17943	Air Defense Artillery Firing Range
Maneuver Areas	17986	Maneuver Area

Sub-Category	Facility Category Group	Facility Category Group (FCG) Description
Maintenance Facilities	21110	Maintenance Hanger AVUM
	21111	Maintenance Hanger AVIM
	(+) 21120	Miscellaneous Aircraft Maintenance Hangers
	(+) 21410	Vehicle Maintenance Shop, Organizational
	21420	Vehicle Maintenance Shop, DS
	45200	Vehicle Hardstand
	21210	Guided Missile Maintenance Building
	(+) 21435	Vehicle Rebuild Facility
	(*) 21456	Central Wash Facility
	(*) 21800	Special Purpose Maintenance Shop
	(X) 21810	Par/ABN Equipment Repair
	(*) 21900	Installation Maintenance Facilities
	(+) 21510	Gun/Weapon Repair Facility
	21830	Miscellaneous Maintenance Building
Production Facilities	(+) 22110	Aircraft Production Buildings
	(+) 22210	Guided Missile Production Facility
	(+) 22310	Ship Production Buildings
	(+) 22410	Tank/Automotive Production Facility
	(+) 22510	Weapons Production Building
	(+) 22610	Explosive Production Facility
	(+) 22710	Communications Production Building
	(+) 22810	Leather & Textile Production Plant
	(+) 22820	Construction Equipment Production Plant
	(+) 22830	Railroad Equipment Production Plant
	(+) 22840	Print Plant
	(+) 22890	Miscellaneous Production Buildings
	(+) 22910	Production Maintenance Repair Operations
General Purpose Instruction Facility	(*) 17120	General Purpose Instruction Facility
	(*) 17115	Band Training Facility
Applied Instruction Facility	(*) 17130	Applied Instruction Facility
	(*) 17160	Training Aids Support Center

Sub-Category	Facility Category Group	Facility Category Group (FCG) Description
Research & Development Buildings	(+) 31010	RDT&E Laboratory
	(+) 31110	Aircraft RDT&E
	(+) 31210	Missile, Space RDT&E
	(+) 31310	Marine Equipment RDT&E
	(+) 31410	Tank/Automotive RDT&E
	(+) 31510	Weapon RDT&E
	(+) 31610	Explosive RDT&E
	(+) 31710	Electronic RDT&E
	(+) 31810	Propulsion RDT&E
	(+) 31910	Non-Metallic RDT&E
	(+) 32010	Under-water Equipment RDT&E
	(+) 32110	Technical Services Support
	(+) 39010	Other RDT&E Facilities
Research & Development Ranges	(+) 37110	RDT&E Range Facilities
Bulk Fuel Receipt, Issue, & Storage Site	(*) 41100	Liquid Fuel Storage
General Supply & Storage Facilities	(*) 43200	Cold Storage, Installation
	(+) 44100	General Purpose Ware House, Depot
	(*) 44200	General Purpose Warehouse, Installation
	(*) 44230	Controlled Humidity Storage
	(*) 44240	Flammable Material Storage
	44260	Vehicle Storage Shed
Ammunition Storage Facilities	(+) 42100	Conventional Ammunition Facilities, Depot
	(*) 42210	Conventional Ammunition Facilities, Installation
Ammunition Maintenance Facilities	21610	Ammunition Maintenance Facilities
Unit Operations Buildings	14112	Aviation Operations Buildings
	14182	Brigade Headquarters Buildings
	14183	Battalion Headquarters Buildings
	14185	Company Headquarters Buildings
General Purpose Administrative Facilities	61050	General Purpose Administrative
Confinement Facilities	(+) 73015	Confinement Facility
Strategic Mobility Facilities		
Surfaced Roads	(*) 85100	Roads
	(*) 85210	Organizational Vehicle Parking
	(*) 85215	Non-organizational Vehicle Parking
Bridges, Unsurfaced Roads, & Tank Trails	(X) 85120	Miscellaneous Roads/Bridges
Railroad Track	(X) 86010	Railroads
	(X) 21320	Marine Railway
Railhead Facilities	N/A	N/A
Airfield Facilities	14110	Air Field Operations Building

Sub-Category	Facility Category Group	Facility Category Group (FCG) Description
Airfield Pavements	11110	Fixed Wing Runways
	11120	Rotary Wing Runways
	11210	Standard Taxiway
	11310	Fixed Wing Aircraft Bridges
	11320	Rotary Wing Aircraft Bridges
	11330	Aircraft Maintenance Aprons
	11340	Hanger Access Aprons
	11350	Aircraft Runway Holding Apron
	11370	Aircraft Washing Apron
	11380	Aircraft Loading Apron
	11610	Compass Swing Base
Piers & Wharves	(X) 15110	Piers/Wharves
Staging & Marshaling Facilities	(X) 14310	Miscellaneous Ship Operations Buildings
	(X) 15310	Staging Area
Rail & Truck Operations Areas	N/A	N/A
Terminal Intermodal Facilities	N/A	N/A
Housing		
Family Housing	71100	Family Housing
Senior Bachelor Enlisted/Bachelor Officer Quarters	(*) 72400	Officer UPH
	72170	Senior Enlisted Quarters
Barracks	72100	Enlisted UPH
	(*) 72114	Enlisted Barracks, AT/MOB
	(*) 72181	Enlisted Barracks, Trainee
Transient Housing Facilities	(*) 74032	Transient Housing Facilities
Dining Facilities	72200	Unaccompanied Personnel Housing Dining Facility
Community Facilities		
Post Exchange	74052	Exchange Service Station
	74053	Exchange Main, Retail
	74064	Restaurant/Cafe
Commissary	(*) 74021	Commissary
Dental Clinic	54010	Dental Clinic
Hospitals	51010	Hospital
Troop Medical Clinics	55010	Health Clinics
Vet Facilities	(X) 53040	Vet Facility
Child Development Centers	(*) 74014	Child Support Center
Education Facilities	(+) 73048	Dependent Grade Schools
	(+) 73049	Dependent High Schools
	74025	ACES Facility
Physical Fitness Centers	74028	Physical Fitness Facility

Sub-Category	Facility Category Group	Facility Category Group (FCG) Description
Outdoor Sports & Recreation Facilities	75010	Tennis Courts
	75011	Multiple Courts
	(X) 75012	Miscellaneous Recreation Facilities
	(*) 75020	Baseball Fields
	75021	Softball Fields
	(*) 75022	Football/Soccer Fields
	(*) 75030	Outdoor Pools
Recreation Facilities	74022	Skill Development Center
	74024	Skill Development Center, Auto
	74011	Bowling
	(*) 74069	Recreation Building
	(*) 74066	Youth Center
	74010	Auditorium, General Purpose
	74033	Community Center
	74041	Library Center
	(*) 74046	Open Dining Facility
Service Facilities	(+) 73010	Fire Station
	73020	Chapel Center Facilities
	(+) 73028	Drug Abuse Center
	(+) 73030	Laundry/Dry Cleaning Facility
	(+) 73073	Post Office
	(*) 74006	Bank
	(X) 76010	Museum/Memorials
Heat/Air Conditioning Source & Distribution	(+) 82100	Heat Source
	(X) 82111	Miscellaneous Heating Plant
	(+) 82200	Heat Distribution System
Electric Source, Distribution & Substations	(*) 81100	Electric Power Source
	(X) 81121	Miscellaneous Electric Power
	(*) 81200	Electric Power Distribution System
	(*) 81300	Electric Power Substations
Water Treatment, Storage & Distribution	(*) 84100	Water Supply Treatment
	(X) 84127	Miscellaneous Water Treatment
	(*) 84120	Water Supply Storage
	(*) 84200	Water Supply Distribution System
Sewage Treatment, Disposal & Collection	(*) 83100	Sewer Treatment & Disposal
	(X) 83120	Miscellaneous Sewage Treatment
	(*) 83200	Wastewater Collection System
	(X) 83310	Waste/Refuse Garbage Facility

Sub-Category	Facility Category Group	Facility Category Group (FCG) Description
Information Management	N/A	N/A
Army Reserve Facility	(+) 17140	Army Reserve Center
	(+) 21409	Army Reserve Maintenance Facility
National Guard Facility	(+) 17142	National Guard Center
	(+) 21407	National Guard Maintenance Facility

(*) = Unvalidated Space Planning Algorithm

(+) = HQRPLANS/RPLANS Allowance = Total Installation Assets

(X) = Not presently included in HQRPLANS/RPLANS analysis/standards reports. For the purpose of the Installation Status Report: Allowances = Total Installation Assets

Appendix E
Detailed Quality C-level Explanation

A quality C-level is calculated for each facility category group (FCG) which comprises a sub-category. The example we will work through is for the sub-category Single Soldiers' Quarters. The FCGs which comprise the sub-category Single Soldiers' Quarters are: Enlisted Unaccompanied Personnel Housing (UPH); Enlisted Barracks, Annual Training (AT)/Mobilization (MOB); Enlisted Barracks, Trainee. The unit of measure is the number of sleeping spaces in the facility. A space is defined as the area allocated to any soldier in the rank E1 - E4.

Information concerning the color condition of each facility on an installation will be entered into the ISR software from the quality roll-up sheet. The ISR software will determine the amount of FCG which is GREEN, AMBER, and RED. Let's work through an example.

The facility number and the facility color condition rating have been collected for the FCG Enlisted UPH (72100) and listed in the table below. These data are entered into the ISR software. The ISR software then links the condition information with a database which contains the capacity of the facility.

Facility Number (Entered into ISR Software)	Color Quality Level (Entered into ISR Software)	Facility Capacity (ISR software provides)
2402	AMBER	24 spaces
2403	GREEN	24 spaces
2404	AMBER	24 spaces
2409	AMBER	24 spaces
2410	AMBER	145 spaces
2411	AMBER	145 spaces
2414	GREEN	145 spaces
2415	AMBER	110 spaces
2416	RED	110 spaces

The ISR software will then determine the amount of Enlisted UPH which is GREEN, AMBER, and RED. The software does the following calculations:

Amount of Enlisted UPH GREEN = 24 spaces + 145 spaces = 169 spaces

Amount of Enlisted UPH AMBER=24 spaces + 24 spaces + 24 spaces + 145 spaces + 145 spaces + 110 spaces = 472 spaces

Amount of Enlisted UPH RED = 110 spaces

Total Enlisted UPH spaces inspected = 169 spaces + 472 spaces + 110 spaces = 751 spaces

Percent of Enlisted UPH GREEN = 169 spaces ÷ 751 spaces x 100= 23%

Percent of Enlisted UPH AMBER = 472 spaces ÷ 751 spaces x 100 = 63%

Percent of Enlisted UPH RED = 110 spaces ÷ 751 spaces x 100 = 14%

Table E-1 provides the method to determine quality C-levels.

Table E-1 Level for quality for facilities
Condition: Percent of facilities GREEN = 100% **Level:** 1
Condition: Percent of facilities GREEN and AMBER = 100% **Level:** 2
Condition: Percent of facilities GREEN and AMBER ≥ 50% **Level:** 3
Condition: Percent of facilities RED ≥ 50% **Level:** 4

From the example: Percent of facilities GREEN = 23%
Percent of facilities AMBER = 63%
Percent of facilities RED = 14%

The ISR software calculates the following:

Percent of facilities GREEN + Percent of facilities AMBER = 23% + 63% = 86%

By using Table E-1, the ISR software determines the quality C-level for Enlisted UPH is C-3.

The ISR software computes quality C-levels for all FCGs that comprise a sub-category. The table below shows the quality C-levels for FCGs which comprise Barracks.

Facility Category Group (FCG)	Quality C-Level
Enlisted UPH	C-3
Enlisted Barracks, AT/MOB	C-4
Enlisted Barracks, Trainee	C-1

The quality C-level of the sub-category is the average quality C-level for all the facility category groups that comprise the sub-category. The calculations below show how the average quality C-level is determined.

Number of FCGs C-1: 1
Number of FCGs C-2: 0
Number of FCGs C-3: 1
Number of FCGs C-4: 1

Determine a quality C-level for the sub-category.

Number of C-1 FCGs X 1 = 1 X 1 = 1
Number of C-2 FCGs X 2 = 0 X 2 = 0
Number of C-3 FCGs X 3 = 1 X 3 = 3
Number of C-4 FCGs X 4 = 1 X 4 = 4

Average Sub-Category C-level = (1 + 3 + 4) ÷ Number of total FCGs = (1 + 3 + 4) ÷ 3 = 2.7

C-1 if the average sub-category C-level number is less than 1.5.
C-2 if the average sub-category C-level number is greater than or equal to 1.5 and less than 2.5.
C-3 if the average sub-category C-level number is greater than or equal to 2.5 and less than 3.5.
C-4 if the average sub-category C-level number is greater than or equal to 3.5.

The **Quality** C-level for Barracks in this example is C-3.

Appendix F
Detailed Quantity C-level Explanation

A quantity C-level is calculated for each facility category group (FCG) which comprise a sub-category. The ISR Software computes all quantity C-levels. The example we will work through is for the sub-category Barracks. The FCGs which comprise the sub-category Barracks are: Enlisted Unaccompanied Personnel Housing (UPH); Enlisted Barracks, Annual Training (AT)/Mobilization (MOB); Enlisted Barracks, and Trainee. The quantity ratio for a given sub-category is calculated by dividing the permanent area/capacity of a sub-category on-hand by the amount allowed. The quantities on-hand for the FCGs in every sub-category except Communication, Railhead Facilities, Port Rail & Truck Operations Areas, and Port Terminal Intermodal Facilities are available by Category Code (CATCODE) in the Real Property Inventory (RPI) database maintained by the Directorate of Engineering and Housing (DEH) in either the Integrated Facilities Systems, Mini-Micro (IFS-M) or DR REAL databases. A cross-walk table relating CATCODES to FCGs is contained in the installation's Real Property Planning and Analysis System (RPLANS). A cross-walk table relating FCGs to ISR sub-categories is at Appendix C of these instructions. The allowable quantities by FCGs are calculated using the allowance algorithms contained in RPLANS.

The assets and allowances for each installation have been loaded into the ISR software. These data are the latest data sets submitted to the HQIFS program by the installation. The software will use these data to calculate the Quantity Ratio. The installation can see the values used by producing the RPLANS Tabulation Report, "Tabulation of Facilities by FCG, % Allowance Satisfied". The column entitled "Percent Satisfied, Perm" will show the Quantity Ratio.

Let's work through an example. The ISR software contains the following data for Enlisted UPH.

FCG	FCG Description	Unit of Measure	Perm Assets	Semi Perm Assets	Temp Assets	Avail Off Post Housing Assets	Total Assets	Total Leased Assets	Allow	Perm Assets - Allow	Total Assets - Allow
72100	ENL UPH	Space	217	0	50	0	267	0	206	11	61

The ISR software uses the numbers from the Perm Assets and Allow columns to determine the % Allowance Satisfied. From the table above: Perm Assets = 217 and Allow = 206. To determine the % Allowance Satisfied, the following equation is used:

$$\% \text{ Allowance Satisfied} = \text{Perm Assets} \div \text{Allow} = 217 \div 206 \times 100 = 105\%$$

With the % Allowance Satisfied, the quantity C-level for an FCG can be determined using the following table:

Table F-1 Level using % Allowance Satisfied
Percent: 100 or greater Level: C1
Percent: 85 to 99 Level: C2
Percent: 70 to 84 Level: C3
Percent: Below 70 Level: C4

By using Table F-1, the quantity C-level for Enlisted UPH is C-1.

The ISR software computes quantity C-levels for all FCGs that comprise a sub-category. The table below shows the quantity C-levels for FCGs which comprise Barracks.

Facility Category Group (FCG)	Quantity C-Level
Enlisted UPH	C-1
Enlisted Barracks, AT/MOB	C-3
Enlisted Barracks, Trainee	C-2

The quantity C-level of the sub-category is the average quantity C-level for all the facility category groups that comprise the sub-category. The calculations below show how the average quantity C-level is determined.

Number of FCGs C-1: 1
Number of FCGs C-2: 1
Number of FCGs C-3: 1
Number of FCGs C-4: 0

Determine a quality C-level for the sub-category.

Number of C-1 FCGs X 1 = 1 X 1 = 1
Number of C-2 FCGs X 2 = 1 X 2 = 2
Number of C-3 FCGs X 3 = 1 X 3 = 3
Number of C-4 FCGs X 4 = 0 X 4 = 0

Average Sub-Category C-level = (1 + 2 + 3) ÷ Number of total FCGs = (1 + 2 + 3) ÷ 4 = 1.5

C-1 if the average sub-category C-level number is less than 1.5.
C-2 if the average sub-category C-level number is greater than or equal to 1.5 and less than 2.5.
C-3 if the average sub-category C-level number is greater than or equal to 2.5 and less than 3.5.
C-4 if the average sub-category C-level number is greater than or equal to 3.5.

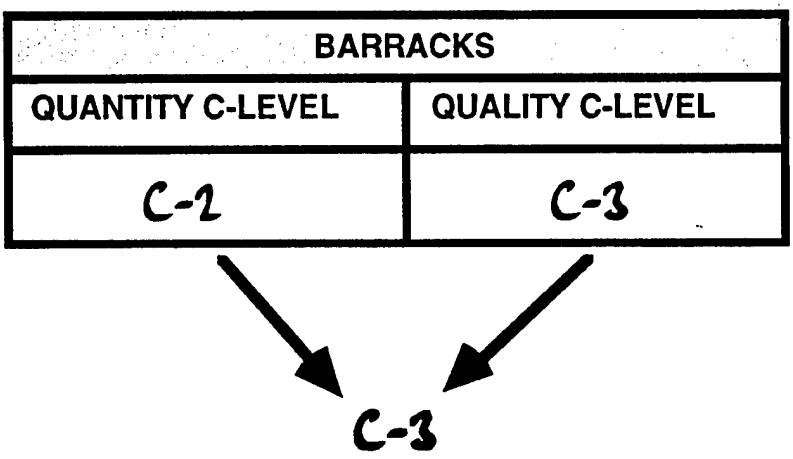
The **Quantity** C-level for Barracks in this example is C-2.

Appendix G
Detailed Sub-Category C-Level Explanation

To determine the C-level of an sub-category (i.e., Barracks), the Quality and Quantity C-levels for that sub-category must be determined from the procedures outlined in appendices E and F. The results of the C-levels for Barracks from appendices E and F are shown in the table below.

Sub-Category	Quantity C-Level	Quality C-Level
Barracks	C-2	C-3

The overall C-level for the sub-category of Barracks is the lower of the quantity and quality C-levels. This is depicted in the figure below.



The C-level for Barracks in this example is C-3.

Appendix H
Detailed Category C-Level Explanation

To determine the C-level of a category (i.e., Unaccompanied Personnel Housing), the C-levels of the sub-categories that comprise the category must first be determined. For example, to determine the C-level of Unaccompanied Personnel Housing, the C-levels must first be determined for Senior Bachelor Enlisted/Bachelor Officer Quarters, Barracks, and Transient Housing Facilities. The Category C-level is the average of the sub-category C-levels. For example, suppose the C-levels for the sub-categories that comprise Unaccompanied Personnel Housing are as follows:

Sub-Category	C-Level
Senior Bachelor Enlisted/Bachelor Officer Quarters	C-2
Barracks	C-3
Transient Housing Facilities	C-1

Number of sub-categories C-1: 1
Number of sub-categories C-2: 1
Number of sub-categories C-3: 1
Number of sub-categories C-4: 0

Determine a C-level for the category.

Number of C-1 sub-categories X 1 = 1 X 1 = 1
Number of C-2 sub-categories X 2 = 1 X 2 = 2
Number of C-3 sub-categories X 3 = 1 X 3 = 3
Number of C-4 sub-categories X 4 = 0 X 4 = 0

Average Category C-level = 1 + 2 + 3 ÷ Number of total sub-categories = 1 + 2 + 3 ÷ 3 = 2.0

C-1 if the average sub-category C-level number is less than 1.5.
C-2 if the average sub-category C-level number is greater than or equal to 1.5 and less than 2.5.
C-3 if the average sub-category C-level number is greater than or equal to 2.5 and less than 3.5.
C-4 if the average sub-category C-level number is greater than or equal to 3.5.

The C-level for Unaccompanied Personnel Housing in this example is C-2.

Appendix I
Detailed Area C-Level Explanation

To determine the C-level of an area (i.e., Housing), the C-levels of the categories that comprise the area must first be determined. For example, to determine the C-level of Housing, the C-levels must first be determined for Family Housing, Unaccompanied Personnel Housing, and Dining Facilities. The Area C-level is the average of the category C-levels. For example, suppose the C-levels for the categories that comprise Housing are as follows:

Category	C-Level
Family Housing	C-1
Unaccompanied Personnel Housing	C-2
Dining Facilities	C-1

Number of categories C-1: 2
Number of categories C-2: 1
Number of categories C-3: 0
Number of categories C-4: 0

Determine a C-level for the area.

Number of C-1 categories X 1 = 2 X 1 = 2
Number of C-2 categories X 2 = 1 X 2 = 2
Number of C-3 categories X 3 = 0 X 3 = 0
Number of C-4 categories X 4 = 0 X 4 = 0

Average Area C-level = 2 + 2 ÷ Number of total categories = 2 + 2 ÷ 3 = 1.3

C-1 if the average sub-category C-level number is less than 1.5.
C-2 if the average sub-category C-level number is greater than or equal to 1.5 and less than 2.5.
C-3 if the average sub-category C-level number is greater than or equal to 2.5 and less than 3.5.
C-4 if the average sub-category C-level number is greater than or equal to 3.5.

The C-level for Housing in this example is C-1.

Other factors are now considered to determine if the C-level of an area should be raised or lowered. The installation commander is authorized to raise or lower the C-level of an area due to other factors.

Appendix J
Detailed Installation C-Level Explanation

To determine the C-level of an installation, the C-levels of all the areas must first be determined. That is, the C-levels for Mission Facilities, Strategic Mobility Facilities, Housing, Community Facilities, Utility Systems, Army Reserve Facilities, and National Guard Facilities must be determined. The Installation C-level is the average of the area C-levels. For example, suppose the C-levels for the following areas:

Area	C-Level
Mission Facilities	C-2
Strategic Mobility Facilities	C-3
Housing	C-1
Community Facilities	C-2
Utility Systems	C-2
Army Reserve Facilities	C-2
National Guard Facilities	C-4

Number of areas C-1: 1
Number of areas C-2: 4
Number of areas C-3: 1
Number of areas C-4: 1

Determine a C-level for the installation.

Number of C-1 areas X 1 = 1 X 1 = 1
Number of C-2 areas X 2 = 4 X 2 = 8
Number of C-1 areas X 3 = 1 X 3 = 3
Number of C-1 areas X 4 = 1 X 4 = 4

Average installation C-level = 1 + 8 + 3 + 4 ÷ Number of areas = 1 + 8 + 3 + 4 ÷ 7 = 2.3

C-1 if the average sub-category C-level number is less than 1.5.
C-2 if the average sub-category C-level number is greater than or equal to 1.5 and less than 2.5.
C-3 if the average sub-category C-level number is greater than or equal to 2.5 and less than 3.5.
C-4 if the average sub-category C-level number is greater than or equal to 3.5.

Thus, the C-level for installation in this example is C-2.

Appendix K
Cost Factors

Cost factors are automatically applied in the ISR software to determine the cost for new construction projects to correct quantity shortfalls (reference Appendix F), the cost to correct quality deficiencies (reference Appendix E), and the cost to sustain all facilities on the installation.

A complete listing of new construction, renovation and sustainment factors is not provided in this appendix since the factors are subject to change each fiscal year and are resident in the ISR software. However, the use of the three different factors is described to illustrate their application and relationship to the calculations described in appendices E and F.

New Construction Cost Factor. This factor is expressed in dollars per unit of measure for each FCG contained in the ISR software. As an example, the new construction cost factor for FCG 72100 (Enlisted UPH) is $25,048 per space. The table below provides an example to show that the % Allowance Satisfied is less than 100% and thus a requirement exists for new construction:

FCG	FCG Description	Unit of Measure	Perm Assets	Semi Perm Assets	Temp Assets	Avail Off Post Housing Assets	Total Assets	Total Leased Assets	Allow	Perm Assets - Allow	Total Assets - Allow
72100	ENL UPH	Space	751	0	50	0	801	0	850	-99	-49

The ISR software uses the numbers from the Perm Assets and Allow columns to determine the % Allowance Satisfied. The new construction cost is calculated as:

New Construction Cost = (Allow - Perm Assets) x New Construction Factor
New Construction Cost = (850 spaces -751 spaces) x ($25,048 per space) = $2,479,752

Renovation Cost Factor. This factor is expressed as a percent of new construction cost to attain GREEN from RED and to attain GREEN from AMBER for each FCG contained in the ISR software. As an example, the Renovation factors fro FCG 72100 (Enlisted UPH) are:

RED Renovation Factor = 0.6460
AMBER Renovation Factor = 0.0009

The following table was presented in Appendix E to illustrate the derivation of a Quality C-level.

Facility Number (Entered into ISR Software)	Color Quality Level (Entered into ISR Software)	Facility Size (ISR software provides)
2402	AMBER	24 spaces
2403	GREEN	24 spaces
2404	AMBER	24 spaces
2409	AMBER	24 spaces
2410	AMBER	145 spaces
2411	AMBER	145 spaces
2414	GREEN	145 spaces
2415	AMBER	110 spaces
2416	RED	110 spaces

Then, the ISR software determines the amount of the Enlisted UPH which is GREEN, AMBER, and RED. The software performs the following calculations:

Amount of Enlisted UPH GREEN = 24 spaces + 145 spaces = 169 spaces

Amount of Enlisted UPH AMBER = 24 spaces +24 spaces +24 spaces +145 spaces +145 spaces +110 spaces = 472 spaces

Amount of Enlisted UPH RED = 110 spaces

Total amount of Enlisted UPH inspected = 169 spaces + 472 spaces + 110 spaces = 751 spaces

The AMBER and RED Renovation Factors are applied at this time to determine the cost to upgrade the AMBER and RED to A GREEN condition. The ISR software determines the Renovation cost using the following general equation for both AMBER and RED conditions:

Renovation Cost = Amount of Facility x Renovation Factor x New Construction Cost Factor For Renovation

The cost to upgrade the amount of AMBER Enlisted UPH is calculated as:

AMBER Renovation Cost = 472 spaces x 0.0009 x $20,960.97 per space = $8,904

The cost to upgrade the amount of RED Enlisted UPH is calculated as:

RED Renovation Cost = 110 spaces x 0.6460 x $20,960.97 per space = $1,489,487

The total renovation cost is calculated as:

Total Renovation Cost = AMBER Renovation Cost + RED Renovation Cost = $8,904 + $1,489,487 = $1,498,391

Sustainment Cost Factor. This cost factor is expressed as dollars per unit of measure and is used to derive the annual sustainment cost for each FCG on an installation. Cost factors are provided for permanent facilities and non-permanent facilities. Cost factors for permanent facilities and non-permanent facilities (i.e., semi-permanent temporary).

The sustainment cost factors for FCG 72100 (Enlisted UPH) are:

Permanent Sustainment Cost Factor = $312.70 per space

Non-Permanent Sustainment Cost Factor = $332.62 per space

The example provided above for the New Construction Cost Factor showed that the Permanent Assets for FCG 72100 accounted for 751 spaces and the Temporary Assets amounted to 50 spaces. The ISR software uses this size data and the two sustainment cost factors listed above to calculate the sustainment cost for FCG 72100 as follows:

Sustainment Cost = (Amount of Permanent Assets x Permanent Sustainment Cost Factor) +
(Amount of Temporary Assets x Non-Permanent Sustainment Cost Factor)

Sustainment Cost = (751 spaces x $312.70 per space) + (50 spaces x $332.62 per space) = $251,469

The methods described above calculate the costs for a single FCG. To determine the costs associated with a sub-category, the costs of all the FCGs that comprise the sub-category are added together.

Escalation Factors. To escalate ISR costs from FY93 dollars to program year dollars, use the following table:

Costs In	Multiply By	To Get Costs In This Year
FY93	1.024	FY94
FY93	1.048	FY95
FY93	1.072	FY96
FY93	1.095	FY97
FY93	1.119	FY98

Appendix L
ISR Software Program

L-1. The ISR Software Program is designed to run in a sand-alone mode of a PC with the following minimum and desirable features:

	Minimum System	Preferred
Computer	IBM compatible XT (8086 or 8088)	IBM compatible 386-SX (20 MHz)
Memory	512 K of RAM	1 MB of RAM
Monitor	Monochrome	Color (EGA or VGA)
Floppy Disk Drive	5 1/4", 360K	3 1/2", 1.44 MB or 5 1/4", 1.2 MB
Hard Drive	10 MB	40 MB
MS DOS	3.1	5.0
Mouse	N/A	N/A
MS Windows	N/A	N/A
Keyboard	Any	101 keyboard
Printer	9 pin, DOT Matrix	Laser printer

L-2. The ISR Software Program has three major components; data entry, data analysis, and reporting.

a. The data entry feature will be the mechanism to introduce the Quality Inspection Ratings for each facility into the ISR Program. It will also be the mechanism to enter the Ratings for those special Sub-Categories (Communications, Railhead Facilities, Port Rail & Truck Operations Areas, and Port Terminal Intermodal Facilities) which are not in the installation's Real Property Inventory. Lastly, it will be the mechanism for the commander to enter the changes to the Area C-levels which his judgment says are appropriate.

b. The data analysis component of the ISR Software Program will perform the many calculations detailed in Appendices E through J.

c. The reporting component of the ISR Software Program will take the results of the analysis and display the resulting data in seven reports. These reports include:

(1) Summary Installation Status Report. This report will list the Category, Area, and Installation C-level ratings. The Category Ratings will be generated by the ISR Software Program from the subordinate FCG and Sub-Category C-levels for most Categories. For certain Sub-Categories, the C-levels will be manually calculated and directly entered into the program through the Commander's Over Write selection on the program's main menu. The Area C-levels will initially be the calculated values. They can be changed by the installation commander through the same Commander's Over Write selection on the main program menu. The installation C-level will be calculated from the Area ratings.

(2) Area/Category Report. This report will list the Sub-Category, Category, and Area C-levels. The Sub-Category C-levels will be calculated from the Quality Inspection results and the Quantity C-levels derived from installation RPI data and RPLANS allowance algorithms. For certain Sub-Categories, the C-levels will be manually calculated and directly entered into the program through the Commander's Over Write selection on the program's main menu. The Category and Area C-levels will be calculated from the Sub-Category C-levels.

(3) Facilities on Hand/Requirements Report. By Facility Category Group (FCG) this report will list the Permanent Assets reported by the installation in their RPI database, the RPLANS calculated allowance, and the percent allowance satisfied by permanent facilities.

(4) Renovation/New Construction Cost Report. By FCG this report will list two classes of costs; quality improvements and quantity improvements. The quality improvement section will display the quality C-level and the costs to improve the quality from its current level to C-1, C-2 and C-3. The quantity improvement section will display the quantity C-level and the costs to improve the quantity from its current level to C-1, C-2, and C-3. The quality C-level will be calculated from the individual inspection ratings entered into the software. The quantity C-level will be calculated from the permanent assets contained in the installation's RPI. The cost values will be calculated from unit cost factors contained in the software and the assets which need to be improved.

(5) Sustainment Cost Report. By FCG this report will list two classes of costs; cost to sustain permanent and other-than-permanent facilities. Each section will list the appropriate assets reported in the installation RPI, the sustainment cost factor, and the sustainment cost. By FCG it will also list the total sustainment costs. The cost values will be calculated from unit cost factors contained in the software and the assets which need to be sustained.

(6) Facility Quality Condition Report. This report will list the facilities inspected. For each facility the report will list the FCG, FCG description, facility number, size/capacity, unit of measure, quality rating, and dollars to improve the quality to GREEN, and UIC of the reporting unit. The quality rating will come from the individual facility inspections. The assets data will be taken from the installation's RPI. The cost values will be calculated from unit cost factors contained in the software and the size of the asset inspected.

(7) Facilities Not Yet Surveyed Report. This report will list the installation number, facility number, FCG, and size of facilities which have not yet had a quality inspection rating entered into the software. It will start with a complete listing of the facilities to be inspected in the ISR program. As quality inspection data is entered into the program, the facility will be removed from the list.

Glossary

Section I
Abbreviations

AAFES
Army Air Force Exchange Service

ABN
airborne

AC
air conditioning

ACES
Army Continuing Education Service

AFH
Army family housing

AMC
U.S. Army Materiel Command

AMEDD
Army Medical Department

APC
armored personnel carrier

ARNG
Army National Guard

ASIP
Army stationing and installation plan

AT
annual training

AVIM
aviation intermediate maintenance

AVUM
aviation unit maintenance

BRAC
base realignment and closure

BY
budget year

CAR
Chief, Army Reserves

CFT

CNGB
Chief, National Guard Bureau

CONUS
continental United States

CY
cubic yard

DA
Department of the Army

DeCA
Defense Commissary Activity

DEH
Directorate of Engineering and Housing

DENTAC
Dental Activity

DOIM
Directorate of Information Management

DOL
Directorate of Logistics

DPCA
Directorate of Personnel and Community Activities

DPTM
Directorate of Planning, Training and Mobilization

DRM
Directorate of Resource Management

DR REAL
desktop reference for real property management

DS
direct support

EDATE
effective date

EHSP
environmental, health, safety, and preservation (historical)

FCG
Facility Category Group

FORSCOM
U.S. Army Forces Command

FY
fiscal year

HQ
headquarters

HQDA
Headquarters, Department of the Army

HQIFS
headquarters

HQRPLANS
headquarters real property planning and analysis systems

IFS-M
integrated facilities system-mini/macro

ISR
Installation Status Report

JANAP
Joint Army-Navy-Air Force Publication

MACOM
major Army command

MEDAC
Medical Activity

MILCON
military construction

MOB
mobilization

MOUT
Military Operations on Urbanized Terrain

MUSARC
Major United States Army Reserve Command

NGB
National Guard Bureau

OCONUS
outside continental United States

OTSG
Office of The Surgeon General

POL
petroleum, oils, and lubricants

POM
program objective memorandum

RC
Reserve Component

RDT&E
research, development, testing, and evaluation

RPLANS
real property planning and analysis system

RPMA
real property maintenance activities

TADS
total Army basing study

TRADOC
U.S. Army Training and Doctrine Command

UIC
unit identification code

UPH
unaccompanied personnel housing

USAR
U.S. Army Reserve

Section II
Terms

EDATE (effective date)
a six-position numeric code that signifies the actual date that an authorization document is effective; for example, 871001. The first two digits are the calendar year, third and fourth are the month, and fifth and sixth are the day.

Facility Allowances
These are determined using the information and algorithms contained in IFS-M and RPLANS.

On hand facilities
These are the facilities that are existing and being used on an installation.

Unit identification code
A 6-character code assigned to a specific unit that can be used to identify that unit.

Index

This index is organized alphabetically by topic and by topics within a topic. Topics and sub-topics are identified by paragraph and table number.

DRAFT AS OF: 4 June 1993 15:27

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation:	As Of Date:

Mission Facilities	
Training Ranges & Areas	
Maintenance & Production Facilities	
Classrooms	
Research & Development	
Supply & Storage Facilities	
Conventional Ammunition Facilities	
Administrative Facilities	
Strategic Mobility Facilities	
Road & Trail Network	
Railroad	
Airfield	
Ports	
Housing	
Family Housing	
Unaccompanied Personnel Housing	
Dining Facilities	
Community Facilities	
Post Exchange	
Commissary	
Hospital & Medical Facilities	
Child Development Centers	
Community Support	
Utility Systems	
Heat/AC	
Electric/Gas	
Water	
Sewer	
Communications	
Army Reserve Facilities	
National Guard Facilities	
Overall Infrastructure C-Level	

Installation Commander's Signature: _____

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation:	As Of Date:
Appropriation:	

APPROPRIATION SUSTAINMENT COSTS TO MAINTAIN CURRENT C-LEVEL

Budget Year (BY) ($1,000's)	Budget Year (BY) + 1 ($1,000's)	Budget Year (BY) + 2 through 4 ($1,000's)	Total ($1,000's)

APPROPRIATION CAPITAL COSTS TO RAISE TO A C-1 LEVEL

Area	Current C-Level	Funding Required To Attain C-1 Assessment ($1,000)									
		Real Property Maintenance Activities (RPMA)					Military Construction (MILCON)				
		BY	BY+1	BY+2	BY+3	BY+4	BY	BY+1	BY+2	BY+3	BY+4
Mission Facilities											
Strategic Mobility Facilities											
Housing											
Community Facilities											
Utility Systems											
Army Reserve Facilities											
National Guard Facilities											
TOTAL											

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation:	As Of Date:

INSTALLATION SUSTAINMENT COSTS TO MAINTAIN CURRENT C-LEVEL

Budget Year (BY) ($1,000's)	Budget Year (BY) + 1 ($1,000's)	Budget Year (BY) + 2 through 4 ($1,000's)	Total ($1,000's)

INSTALLATION CAPITAL COSTS TO RAISE TO A C-1 LEVEL

Area	Current C-Level	Funding Required To Attain C-1 Assessment ($1,000)									
		Real Property Maintenance Activities (RPMA)					Military Construction (MILCON)				
		BY	BY+1	BY+2	BY+3	BY+4	BY	BY+1	BY+2	BY+3	BY+4
Mission Facilities											
Strategic Mobility Facilities											
Housing											
Community Facilities											
Utility Systems											
Army Reserve Facilities											
National Guard Facilities											
TOTAL											

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation:	As Of Date:
Appropriation:	

APPROPRIATION PROGRESS STATEMENT

Area	Last Report's C-Level	Dollars Appropriated ($1,000)	Dollars Obligated ($1,000)	Current C-Level
Mission Facilities				
Strategic Mobility Facilities				
Housing				
Community Facilities				
Utility Systems				
Army Reserve Facilities				
National Guard Facilities				
TOTAL				

Comments:

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation:	As Of Date:

INSTALLATION PROGRESS STATEMENT

Area	Last Report's C-Level	Dollars Appropriated ($1,000)	Dollars Obligated ($1,000)	Current C-Level
Mission Facilities				
Strategic Mobility Facilities				
Housing				
Community Facilities				
Utility Systems				
Army Reserve Facilities				
National Guard Facilities				
TOTAL				

Comments:

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation:	As Of Date:

QUALITY ROLL-UP SHEET

Facility Number	Installation Number	User UIC	Color Quality Level (GREEN, AMBER, RED)	Quality Inspector	Date Inspected

INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation:	As Of Date:

QUALITY COMMENTS ROLL-UP SHEET

Location Comments By Facility Number:

Environmental, Health, Safety, & Preservation (EHSP) Comments By Facility Number:

Installation Status Report

Unsurfaced Roads & Tank Trail

Standards Booklet

1. Select the correct inspection worksheet and standards booklet to evaluate your facility.

2. Rate each inspection item on the inspection worksheet by first looking at the picture in the standards booklet, then reading the bullets under the picture to select the color level that best fits the item being evaluated.

3. If there is not an inspection item in the facility and it is not needed, do not rate that item.

4. If there is not an inspection item in the facility and it is needed, rate that inspection item as RED.

5. Determine the majority item Color-level by summing the "X's" recorded in each color column.

6. Determine the critical item Color-level by selecting the lowest Color-level that any critical item is rated. Critical items are identified by asterisks on the Inspection Worksheets.

7. Determine the facility's overall Color-level by selecting the lower Color-level between the majority items Color-level (determined in step 5) and the critical item Color-level (determined in step 6).

8. If deemed necessary, write comments concerning location. Location pertains to the location of a facility on the installation.

9. If known, write comments concerning environmental, health, safety, and preservation (EHSP). EHSP comments address problems which can degrade a facility.

UNSURFACED ROADS & TRAILS STANDARDS BOOKLET

UNSURFACED ROADS AND TANK TRAILS

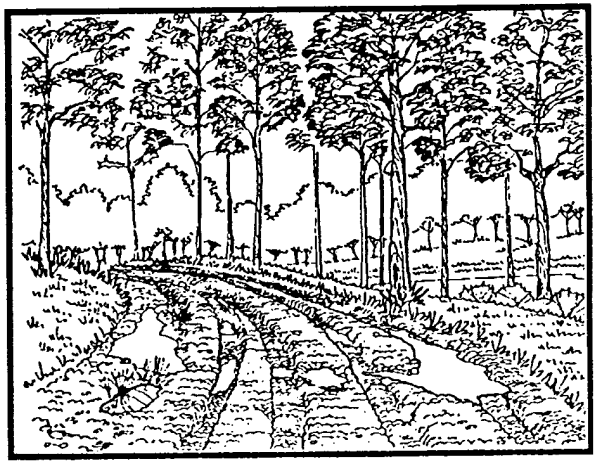
GREEN

- Proper cross section, only small amounts of ponding
- Adequate roadside drainage
- No corrugation
- No potholes
- No ruts
- No loose aggregate
- Low severity dust, no obstruction of visibility
- Road and trail network sufficient and strategically designed

AMBER

- Improper cross section, moderate ponding
- Limited roadside drainage
- Limited corrugation
- Minimal number of small potholes
- Limited ruts
- Some loose aggregate
- Medium severity dust, partial obstruction of visibility
- Road and trail network sufficient, but needs design improvement

RED



- Improper cross section, severe ponding
- Improper roadside drainage
- Severe corrugation
- Severe potholes
- Severe rutting
- Severe loose aggregate
- High severity dust, severe obstruction of visibility
- Insufficient road and trail network

ISR FIELD TEST EVALUATION SURVEY

Installation Survey

Objective #1 - ISR assesses installation conditions.

1. a. The ISR can be a useful tool for assessing the condition of my installation.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

b. If you answered with 1. or 2. above, give any ideas which could make the ISR a more effective tool for assessing conditions.

2. The ISR provides a common language for commanders, engineers, resource managers and units to use in identifying facilities which need improvements to meet Army standards.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

3. a. The areas included on the ISR (Mission facilities, Strategic Mobility Systems, Housing, Community facilities, Utility Systems, Army Reserve facilities, National Guard facilities) adequately cover major types of infrastructure on installations.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

b. If you answered with 1. or 2. above, complete the following: (otherwise, skip this question)

1) The following areas should be added:

2) The following areas should be eliminated:

4. The categories under *Mission Facilities* (Training ranges & Areas, Maintenance and Production facilities, Classrooms, Research and Development, Storage & Warehouses, Administrative facilities) are sufficient to describe the infrastructure in this area at this installation.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

b. If you answered with 1. or 2. above, complete the following: (otherwise, skip this question)

1) The following categories should be added:

2) The following categories should be eliminated:

5. a. The categories under Strategic Mobility Facilities (Road & Trail network, Railroad, Airfield, Ports) are sufficient to describe the infrastructure on my installation in this area at this installation.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

b. If you answered with 1. or 2. above, complete the following: (otherwise, skip this question)

1) The following categories should be added:

2) The following categories should be eliminated:

6. a. The categories under *Housing* (Family Housing, Unaccompanied Personnel Housing, Dining facilities) are sufficient to describe the infrastructure in this area at this installation.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

b. If you answered with 1. or 2. above, complete the following: (otherwise, skip this question)

1) The following categories should be added:

2) The following categories should be eliminated:

7. a. The categories under *Community Facilities* (Post Exchange, Commissary, Hospital & Medical facilities, Child Development Centers, Community Support) are sufficient to describe the infrastructure in this area at this installation.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

b. If you answered with 1. or 2. above, complete the following: (otherwise, skip this question)

1) The following categories should be added:

2) The following categories should be eliminated:

8. a. The categories under *Utility Systems* (Heat/AC, Electric/Gas, Water, Sewer, Information Management) are sufficient to describe the infrastructure on my installation in this area at this installation.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

b. If you answered with 1. or 2. above, complete the following: (otherwise, skip this question)

1) The following categories should be added:

2) The following categories should be eliminated:

9. a. The *Army Reserve Facilities* area **does not** need to be further defined by categories to describe the infrastructure at this installation

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

b. If you answered with 1. or 2. above, list the categories that should be added:

10.a. The *National Guard Facilities* area **does not** need to be further defined by categories to describe the infrastructure at this installation

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

b. If you answered with 1. or 2. above, list the categories that should be added:

Objective #2 - ISR establishes Army-wide standards.

For each category below, the standards for evaluating the facilities in the category are reasonably simple, yet valid. Explain answers 1. or 2. in the space provided. Also, please indicate who (agency, staff section unit, etc.) evaluated the facilities within each category.

1. Training Ranges and Areas

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

2. Maintenance and Production Facilities

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

3. Classrooms

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

4. Research and Development

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

5. Storage and Warehouses

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

6. Admin Facilities

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

7. Road and Trail Network

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Agency, staff section, or unit evaluating facilities in this category:

8. Railroad

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

9. Airfield

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

10. Ports

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

11. Family Housing

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

12. Unaccompanied Personnel Housing

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

13. Dining Facilities

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

14. Post Exchange

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

15. Commissary

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

16. Hospital and Medical Facilities

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

17. Child Care Facilities

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

18. Community Support

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

19. Heat/AC

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

20. Electric/Gas

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Agency, staff section, or unit evaluating facilities in this category:

21. Water

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

22. Sewer

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

23. Information Management

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

a. Explanation of 1. or 2:

b. Activity, staff section, or unit evaluating facilities in this category:

Objective #3 - ISR Articulates installation needs.

1. a. Overall the ISR could be an effective means for describing the needed improvements to the infrastructure at this installation.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

b. If you answered 1. or 2. to the last question, give any ideas for changes which could make ISR more effective in describing installation needs:

Objective #4 - ISR estimates resources.

1. The ISR could effectively (although, not precisely) articulate resource requirements to correct infrastructure shortcomings.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

2. The IRS's capability to articulate resource requirements at installation level could be improved by doing the following:

3. If you used cost estimates other than with the automated ISR support package, explain below:

Objective #5 - ISR assists in prioritizing projects.

1. The ISR could assist in prioritizing projects and/or programs at installation level:

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

Objective #6 - ISR assists in the allocation of resources.

1. The ISR could assist in allocating dollars at installation level:

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

2. The use of the ISR to assist in allocating dollars could be improved by:

Objective #7 - ISR measures progress.

1. The ISR could effectively monitor installation progress toward goals for condition improvement:

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

2. The use of the ISR to assist in monitoring progress toward goals could be improved by:

Other:

1. Assuming satisfactory standards and algorithms (for combining quantity, quality and other factors) for each area, a C-rating system of C1 through C5 is sufficient to describe (in simple terms) infrastructure conditions at installations.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

2. The adjectival descriptions for C1 through C4 are appropriate.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

3. The quality descriptions of green, amber, red are appropriate.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

4. a. The algorithms for combining quantity, quality and other factors into C-ratings are appropriate.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

b. If you answered 1. or 2. in a. above, describe any ideas you have for obtaining a better overall assessment of problem areas.

5. Worksheets for recording facility quality ratings of green, amber, red were helpful and relatively easy to use:

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

6. Worksheets for recording facility quality ratings of green, amber, red were essential to accurately evaluating facility condition:

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

7. The process of determining C-ratings for facilities using automation, quality ratings (green, amber, red) and the quantity ratio was easy to implement:

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

8. Translating facility quality ratings of green, amber and red into C-ratings using automation was easy.

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

9. Determining the C-ratings for sub-categories from the C-ratings for facilities was easy.

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

10. In general, standards booklets were effective tools for describing conditions.

1	2	3	4	5
Strongly disagree	disagree	no opinion	agree	strongly agree

11. Standards booklets are useful in the following sub-categories:

12. Standards booklets are not useful in the following sub-categories:

13.a. Use of the ISR at installation, MACOM, and HQDA level could eliminate the need for other current reporting systems (installation level and higher)

1	2	3	4	5	6
Strongly disagree	disagree	no opinion	agree	strongly agree	not applicable

b. If you answered 4. or 5. in a. above, please indicate what current reports provide the information being captured on the ISR:

14. Consider how much time elapses before infrastructure conditions change significantly on your installation. Given the rate of significant change of infrastructure conditions at your installation, how often should the ISR be submitted so that MACOMs and HQDA are aware of current installation conditions? (Every six months? Annually? Every other year? Other?)

15. Estimate the following for company-level TOE units:

a. Number of quality (green, amber, red) evaluations prepared for facilities:

b. Man-hours required to complete the quality evaluations for facilities:

Operations Research Center
United States Military Academy
West Point, New York 10996-1779

Installation Status Report

A Decision Support System

Information Briefing

June 1993

Purpose

- To provide information on the development of an Installation Status Report (ISR).

Background

The ISR is in response to concerns that current systems and reports are not meeting Army needs for installation management.

Concerns are exacerbated by:

- Reduced budgets
- Difficulty in prioritizing/allocating scarce dollars
- The future role of installations as "power projection platforms"

Overview

- Key Players
- ISR Concept
  - -Why
  - -What
  - -How
  - -When
  - -Who
- Proposed Field Test
- Milestones

Key Players

The ASA(FM) organized a study group to investigate ways for improving how the Army plans for and allocates resources for its future needs . . . infrastructure renewal.

ORCEN, USMA -- Provides operations research and analysis support to ASA(FM).

Executive Steering Committee:

Dr. Raynsford	OASA(FM)
BG Herndon	OACE
Mr. DeWire	OASA(IL&E)
TBD	M&RA
MG Meade	ODCSOPS
MG Elam	ODCSLOG
TBD	ODCSPER
Ms. Menig	DM
Dr. Bellaschi	DPAE
BG Thompson	OASA(FM)
Ms. Leiby	OASA(FM)
Mr. Valletta	ODISC4
BG Brown	OACE
Mr. Bagby	CEAC

Project Working Group:

Army Secretariat and ARSTAF (including OCAR and NGB)
Selected Field Operating Agencies

ISR Concept
What is the ISR?

- "A decision support system to improve management of limited resources for installations."

- Designed --
  - Similar to Unit Status Report (USR)
  - A Commander's tool
  - To be user friendly

- Three Parts
  - Infrastructure
  - Environmental
  - Services

- Serves needs of different customers --
  - Installation Commander
  - MACOMs
  - HQDA

- Identifies problems and resource needs

- Does not contain --
  - Engineering language
  - Detailed information

Part I Project Goal

Achieve Installation Renewal (IR)/ Facilities Revitalization through improved justification and prioritization of limited Army resources.

Project Objectives

To develop a Commander's decision support system that:

- **assesses installation *conditions***
- **establishes Army-wide *standards***
- **articulates *installation* and *Army needs***
- ***estimates* IR resource *requirements***
- ***assists* in *prioritizing* programs, projects**
- **assists in *allocation* of resources**
- **measures *progress***

Installation Status Report

INSTALLATION STATUS REPORT

PART ONE - INFRASTRUCTURE

Installation: Fort Harmon | As Of Date: 1 April 93

Mission Facilities	C-1
Training Ranges & Areas	C-1
Maintenance & Production Facilities	C-1
Classrooms	C-1
Research & Development	C-1
Supply & Storage Facilities	C-1
Conventional Ammunition Facilities	C-1
Administrative Facilities	C-1
Strategic Mobility Facilities	C-1
Road & Trail Network	C-1
Railroad	C-1
Airfield	C-1
Ports	C-1
Housing	C-1
Family Housing	C-1
Unaccompanied Personnel Housing	C-1
Dining Facilities	C-1
Community Facilities	C-1
Post Exchange	C-1
Commissary	C-1
Hospital & Medical Facilities	C-1
Child Development Centers	C-1
Community Support	C-1
Utility Systems	C-1
Heat/AC	C-1
Electric/Gas	C-1
Water	C-1
Sewer	C-1
Communications	C-1
Army Reserve Facilities	C-1
National Guard Facilities	C-1
Overall Infrastructure C-Level	C-1

Installation Commander's Signature: John Hourg, MG, USA

Infrastructure Rating Definitions

C1	All required facilities available Meets unit needs and Army standards No functional deficiencies Infrastructure fully supports and enhances mission performance No significant environmental, health, safety, or preservation (EHSP) issues
C2	Most required facilities available Meets unit needs and partially meets Army standards Minor functional deficiencies Infrastructure supports majority of assigned missions Minor environmental, health, safety, or preservation (EHSP) issues
C3	Most required facilities available Meets majority of unit needs, however, does not meet Army standards Minor functional deficiencies Impairs mission performance Minor environmental, health, safety, or preservation (EHSP) issues
C4	Most required facilities not available Does not meet unit needs or Army standards Major functional deficiencies Significantly impairs mission performance Major environmental, health, safety, or preservation (EHSP) issues
C5	Undergoing major reorganization or construction changes Newly activated/inactivated installation/unit or base closure ongoing

C-Rating Determination

C-RATING = f(quantity, quality, other factors)

Category and Sub-Category:

Quantity =	$\frac{\text{Existing Facilities}}{\text{Required Facilities}}$
Quality =	Percent in Green, Amber, or Red based on Army wide standards, using inspection worksheets and standard booklets

Area:

Other Factors =	Mitigating environmental, health, safety, and preservation (EHSP) factors or concerns, specific to particular categories

Quality Condition Assessment

GREEN = Complies with standards
Overall good condition

AMBER = Does not meet standards
Overall fair condition

RED = Dysfunctional or substandard
Overall poor condition

Inspection Worksheet

Barracks Inspection Worksheet *Unaccompanied Personnel Housing Category*			Overall Quality Rating:
Facility Number: Facility User UIC: Facility Category Group:	Installation Number:	Inspector:	Date Completed:

FACILITY CONDITION ASSESSMENT

Condition of Each Area

Place an "X" in the box that applies to the Troop Barracks for each inspection area.

Inspection Item	GREEN	AMBER	RED
Common Building Items			
1. Site & Grounds	☐	☐	☐
2. Parking	☐	☐	☐
3. Building Exterior ***	☐	☐	☐
4. Loading Dock	☐	☐	☐
5. Lobby	☐	☐	☐
6. Administrative Areas	☐	☐	☐
7. Stairs	☐	☐	☐
8. Corridors	☐	☐	☐
9. Toilets & Showers ***	☐	☐	☐
10. Utilities ***	☐	☐	☐
Facility Specific Items			
11. Lounge	☐	☐	☐
12. Living Area ***	☐	☐	☐
13. Outdoor Formation Area	☐	☐	☐
Sum of "X's" in each column			
Majority item color rating	☐	☐	☐
Critical *** item color rating	☐	☐	☐

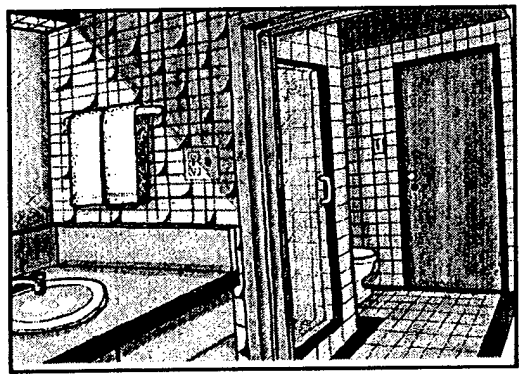
Location Comment:

Environmental, Health, Safety, & Preservation (EHSP) Comment:

Barracks Quality Standards

Toilet/Shower

GREEN



Troops toilet/shower upgraded to semi-private facilities

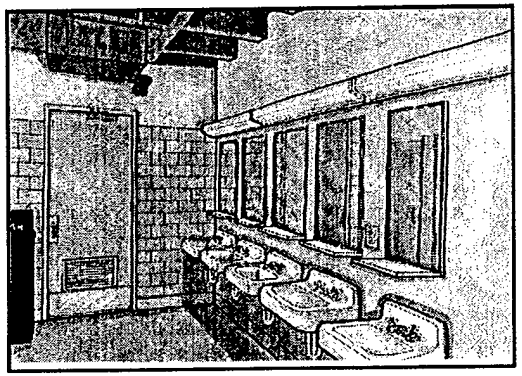
Walls upgraded to ceramic tile/vinyl wall-covering with matching trim

Floor upgraded to ceramic tile with ceramic base

Built-in ventilation fan and electrical safety outlets

All of the soldiers assigned to the latrine have hot water for showers

AMBER



Exposed ceiling structure, conduit, etc. painted

Mirrors repaired

Sinks and toilets, lighting fixtures, door , and tile repaired

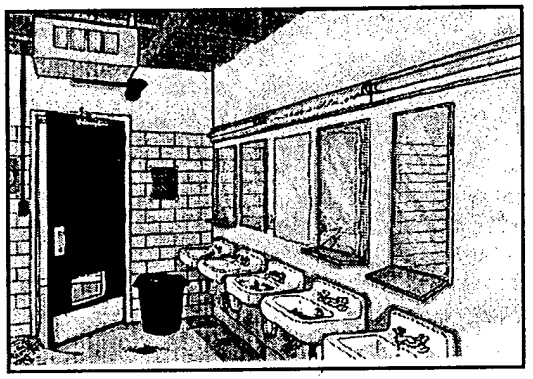
Standing fan placed in room

Emergency lighting present

75% of the soldiers assigned to the latrine have hot water for showers

Water pressure does not drop when toilets are flushed

RED



Exposed ceiling structure, conduit, piping, and mechanical equipment

Broken and missing mirrors

Leaking sinks and toilets

Lighting fixtures,doors, and tile in poor state of repair

No ventilation fan, electrical safety outlets, or emergency lighting

Water pressure drops when toilets are flushed

Half of the soldiers assigned to the latrine have hot water for showers

Source: Standards for Barracks, Communities of Excellence, TRADOC

Sub-Category C-Level Example

Barracks

C3

Quantity		Quality					Rating
Existing / Required		Number of Units	GREEN	AMBER	RED		
0.85	+	*17*	*29%*	*53%*	*18%*	=	*C3*

C2 → *C3* ← *C3* → *C3*

Location Comment: ***Low cost housing available in surrounding community.***
Environmental, Health, Safety, Preservation (EHSP) Comment: ***None***

Installation Report Overview

Name Of Installation FORT HARMON

Host/ Tenant	Infrastructure Category					Overall Rating
	Mission Facilities	Strategic Mobility Facilities	Housing	Community Facilities	Utility Systems	
Fort Harmon	*C1*	*C1*	*C3*	*C3*	*C2*	*C2*
TRADOC	*C1*	*N/A*	*N/A*	*N/A*	*N/A*	*C1*
AMC	*C1*	*N/A*	*N/A*	*N/A*	*N/A*	*C1*
DeCA	*N/A*	*N/A*	*N/A*	*C2*	*N/A*	*C2*
AAFES	*N/A*	*N/A*	*N/A*	*C3*	*N/A*	*C3*
Reserve	*C1*	*N/A*	*N/A*	*N/A*	*N/A*	*C1*
NG	*C1*	*N/A*	*N/A*	*N/A*	*N/A*	*C1*
Ft Harmon Overall	*C1*	*C1*	*C3*	*C3*	*C2*	*C2*

Comments: *None*

MACOM Report Overview

Name Of MACOM FORSCOM

Facility Condition

Installation	Infrastructure Category					Overall Rating (Notional)
	Mission Facilities	Strategic Mobility Facilities	Housing	Community Facilities	Utility Systems	
Bragg	*C1*	*C1*	*C3*	*C3*	*C2*	*C2*
Campbell	*C1*	*C2*	*C2*	*C3*	*C2*	*C2*
Drum	*C2*	*C2*	*C1*	*C1*	*C2*	*C2*
Stewart	*C1*	*C1*	*C3*	*C3*	*C3*	*C2*
⋮	⋮	⋮	⋮	⋮	⋮	⋮

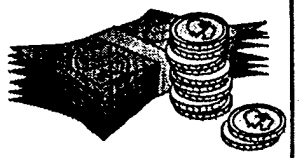
HQDA Report Overview

Facility Condition

Installation	Infrastructure Category						Overall Rating *
	MACOM	Mission Facilities	Strategic Mobility Facilities	Housing	Community Facilities	Utility Systems	
Aberdeen	*AMC*	*C2*	*C2*	*C1*	*C1*	*C2*	*C2*
Redstone	*AMC*	*C1*	*C1*	*C3*	*C3*	*C3*	*C2*
Bragg	*FORSCOM*	*C1*	*C1*	*C3*	*C3*	*C2*	*C2*
Campbell	*FORSCOM*	*C1*	*C2*	*C2*	*C3*	*C2*	*C2*
Sheridan	*FORSCOM*	*C5*	*C5*	*C5*	*C5*	*C5*	*C5*
Irwin	*TRADOC*	*C1*	*C2*	*C1*	*C2*	*C1*	*C1*
Sill	*TRADOC*	*C2*	*C2*	*C1*	*C2*	*C2*	*C2*
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮

*NOTIONAL

Installation Commander Articulates Needs



INSTALLATION STATUS REPORT

PART ONE – INFRASTRUCTURE

Installation: Fort Harmon | As Of Date: 1 April 93

INSTALLATION SUSTAINMENT COSTS TO MAINTAIN CURRENT C-LEVEL

Budget Year (BY) ($1,000's)	Budget Year (BY) + 1 ($1,000's)	Budget Year (BY) + 2 through 4 ($1,000's)	Total ($1,000's)
$60,000	$63,000	$117,000	$110,000

INSTALLATION CAPITAL COSTS TO RAISE TO A C-1 LEVEL

Area	Current C-Level	Funding Required To Attain C-1 Assessment ($1,000)									
		Real Property Maintenance Activities (RPMA)					Military Construction (MILCON)				
		BY	BY+1	BY+2	BY+3	BY+4	BY	BY+1	BY+2	BY+3	BY+4
Mission Facilities	C-2	$600	$100	$100	$100	$100	$6,000	$1,000	$1,000	$1,000	$1,000
Strategic Mobility Facilities	C-2	$600	$400	$60	$100	$60	$6,000	$4,000	$100	$100	$600
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
TOTAL	C-2	$1,480	$960	$380	$410	$380	$14,300	$9,600	$1,360	$4,126	$4,626

Measure Progress & Provide Credit/Incentive

- Link to last report
- Dollar status from last report to this report against an area

INSTALLATION STATUS REPORT

PART ONE - INFRASTRUCTURE

Installation: Fort Harmon | As Of Date: 1 April 93

PROGRESS STATEMENT

Area	Last Report's C-Level	Dollars Appropriated ($1,000)	Dollars Obligated ($1,000)	Current C-Level
Mission Facilities	C-2	$1,200	$1,050	C-2
Strategic Mobility Facilities	C-2	$800	$800	C-2
⋮	⋮	⋮	⋮	⋮
TOTAL	C-2	$6,601	$6,084	C-2

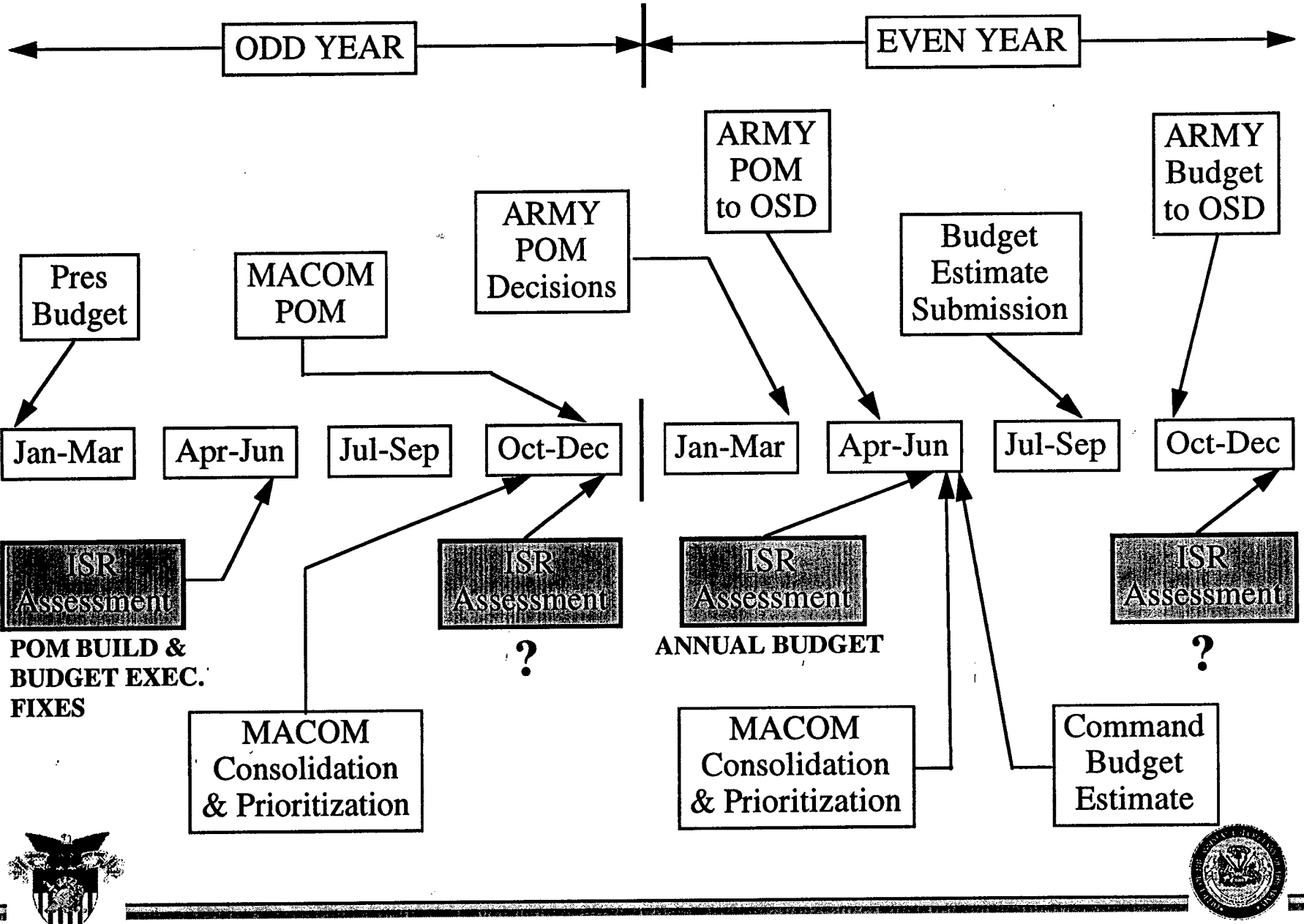
Comments:

MACOM/HQDA Programmatic Overview

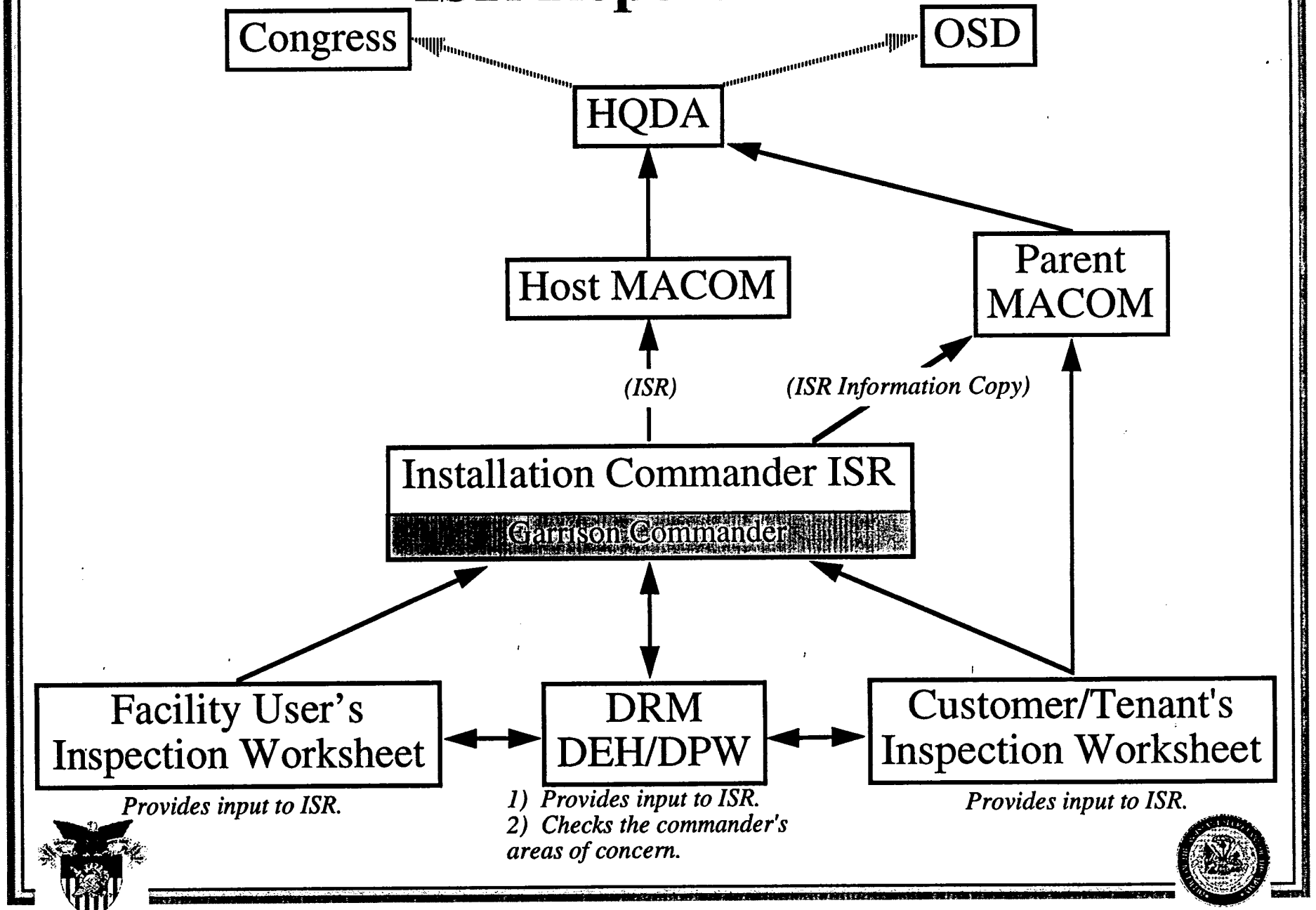
Installation	Current FY92 Rating	Projected Rating with POM Funding					
		FY93 *	FY94 *	FY95 *	FY96 *	FY97 *	FY98 *
Aberdeen	*C2*	*C3*	*C3*	*C2*	*C2*	*C2*	*C2*
Redstone	*C2*	*C2*	*C2*	*C2*	*C3*	*C3*	*C3*
Bragg	*C2*	*C2*	*C2*	*C2*	*C2*	*C2*	*C3*
Campbell	*C2*	*C2*	*C3*	*C3*	*C3*	*C2*	*C2*
Sheridan	*C5*	*C5*	*C5*	*C5*	*C5*	*C5*	*C5*
Irwin	*C2*	*C2*	*C3*	*C3*	*C3*	*C2*	*C2*
Sill	*C2*	*C3*	*C3*	*C3*	*C2*	*C2*	*C2*

*Notional

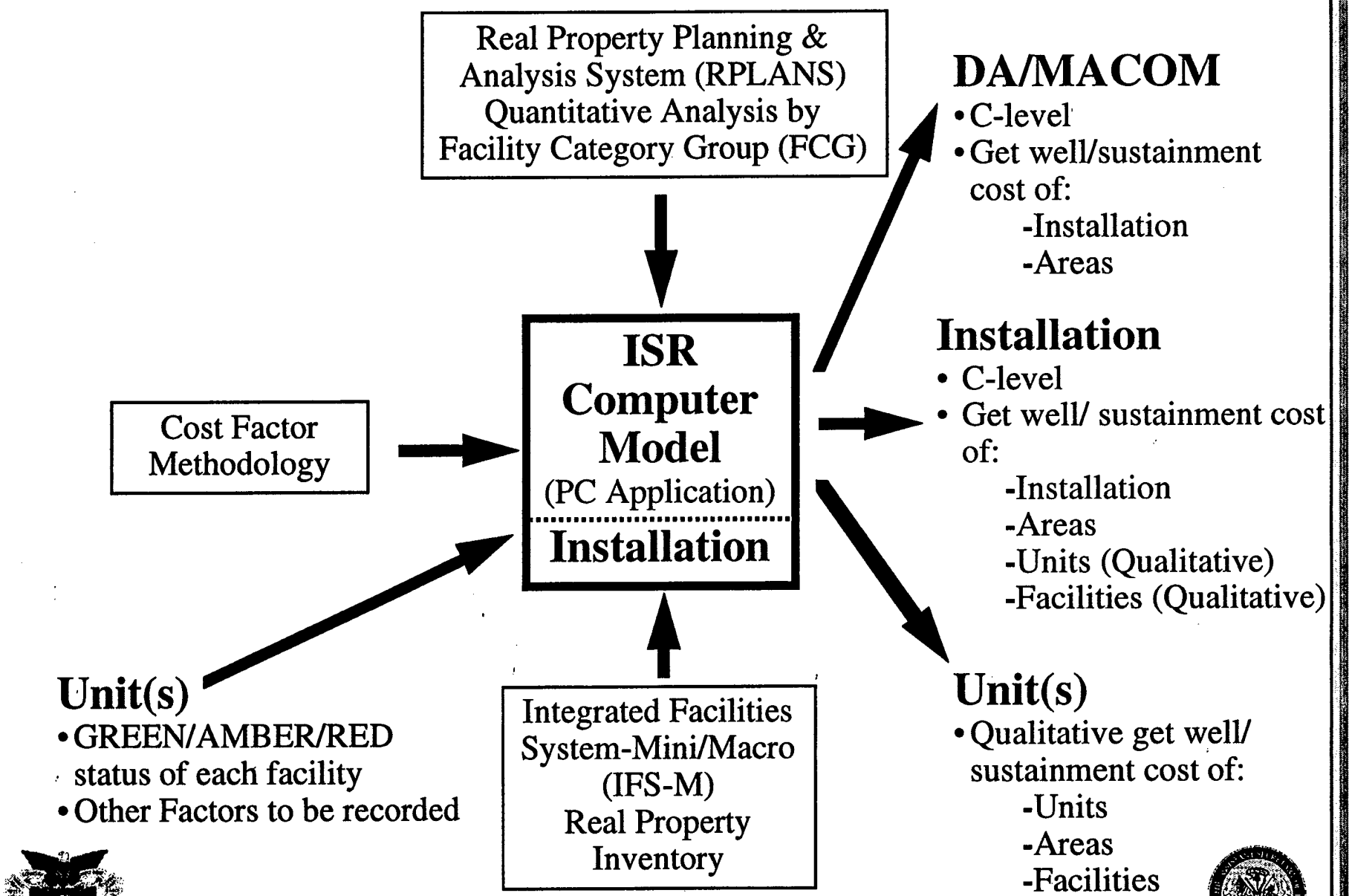
ISR Time Line in PPBES Process



ISR Report Flow



ISR Automation



ISR Coordination Visits

Headquarters/Installation	CoS	CG	Garrison Cdr.	Staff
FORSCOM HQ	X			
Fort Hood		X	X	X
Fort Campbell		X	X	X
Fort Carson		X	X	X
TRADOC HQ	X			
Fort Jackson		X	X	X
Fort Benning*				
Fort Knox*				
Fort Gordon		X	X	X
AMC HQ	X			
Aberdeen Proving Ground		X	X	X
Redstone Arsenal*				
Anniston Army Depot		X	X	X
MDW	X			
Fort Belvoir		X	X	

*June Visits

Proposed ISR Test Sites

Installation	FORSCOM	MDW	TRADOC	AMC	DBOF Test Site	ISM Test Site	Fence To Fence Test Site
Ft. Belvoir		X					
Ft. Campbell	X				X		X
Ft. Carson	X					X	
Ft. Hood	X						
Ft. Benning			X				
Ft. Gordon			X			X	
Ft. Knox			X				
Anniston Army Depot				X		X	
Redstone Arsenal				X		X	
Aberdeen Proving Ground				X			

Proposed Field Test

- Scope of Test
  - Part I - Infrastructure
  - Users apply standards to assess conditions guided by written instructions
  - Installations
    - + Consolidate
    - + Perform cost estimate (automated)
    - + Complete C-levels (automated)
  - CONUS only
- Length of test: approximately 45 days
- Test sites overlap with
  - DBOF
  - ISM
  - Fence To Fence

Proposed Field Test

- Train the trainers
  - MACOMs
  - Installations
- Test criteria:
  - Validate the ISR as a management tool at installations, MACOMs and HQDA
  - Determine the extent to which the ISR achieves its objectives
  - Assess reporting burden and frequency
  - Compare reporting methods (e.g., user/owner or centralized)

Tentative Milestones

Event	Date
Information Briefing to Selected MACOMs and Installations	Ongoing
Information Briefing to Chief of Staff, Army	Jun 93
Staff Test Criteria, Instructions (Draft AR)	Jun 93
Part I Assessment Test at Selected Installations	Jul-Aug 93
Review Test Results	Sep 93
CSA/SA Approval for Fielding & Establish Proponency	Oct 93
Part I Fielding & Part II Assessment Test	Nov 93
Part I Reporting Analysis & Part II Test Result Review	Dec 93
Part I Evaluation & Part II Fielding	Jun 94
Part III Services Assessment	
Refine Standards & Prepare Concept Test Instructions	Mar-May 94
Test at Selected Installations	Jun-Jul 94
Review Test Results	Jul 94
Fielding	Dec 94

Near Term Concept

- Move rapidly toward implementation
- Test what we have
- Field the portions which pass muster
- ISR is an evolving, living document
- Remain sensitive to workload
  - -Eliminate, consolidate reports
  - -Streamline ISR procedures
  - -Minimize number of rated categories
  - -Simplify standards
- Sustain "partnership with the field"
  - -MACOMs
  - -Installations